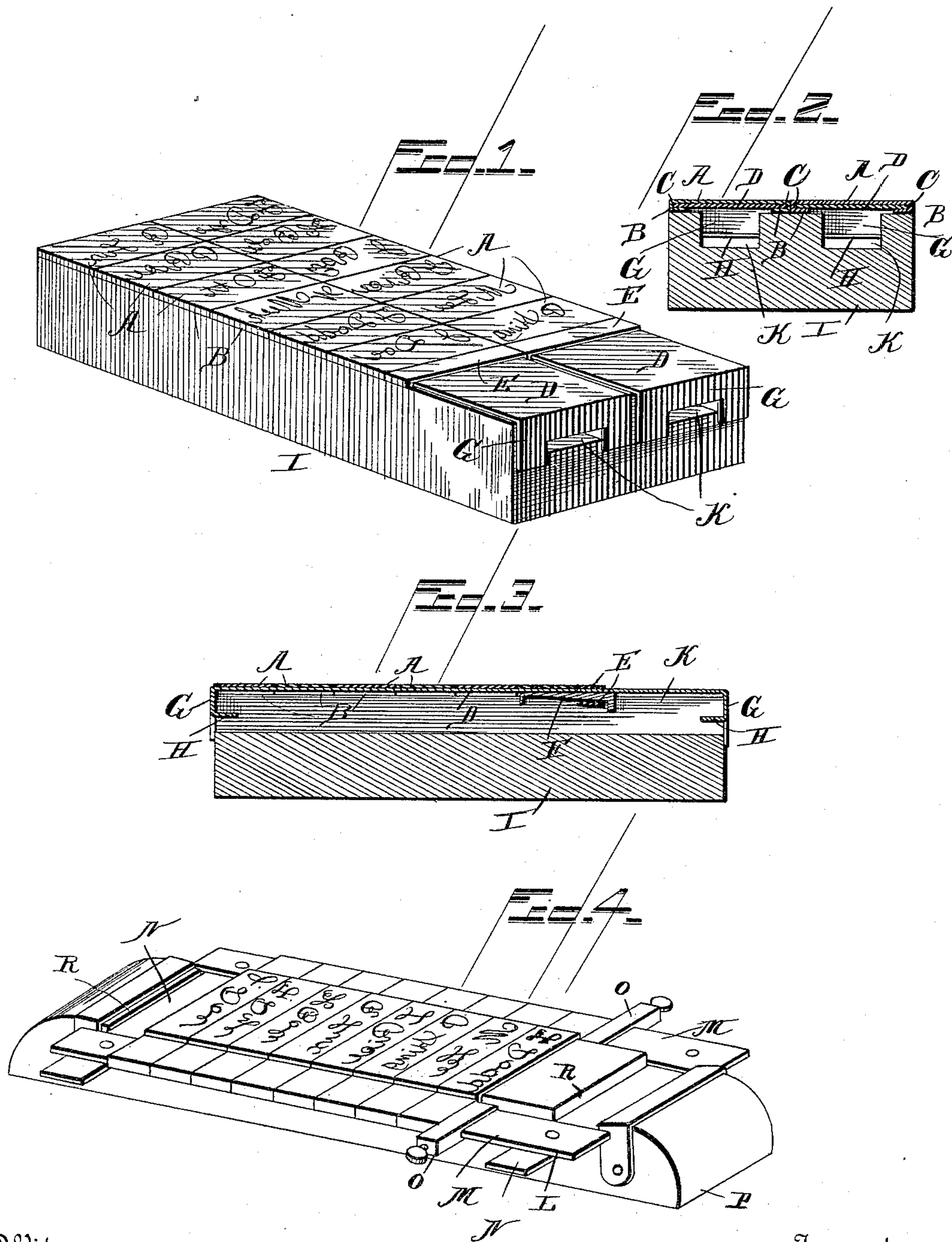


(No Model.)

T. C. EBERHARDT.
PRINTING PLATE.

No. 432,822.

Patented July 22, 1890.



Witnesses

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UNITED STATES PATENT OFFICE.

THEOPHILUS CHARLES EBERHARDT, OF CUERO, TEXAS.

PRINTING-PLATE.

SPECIFICATION forming part of Letters Patent No. 432,822, dated July 22, 1890.

Application filed December 14, 1888. Serial No. 293,594. (No model.)

To all whom it may concern:

Be it known that I, THEOPHILUS CHARLES EBERHARDT, a citizen of the United States, residing at Cuero, in the county of De Witt and State of Texas, have invented a new and useful Improvement in Printing-Plates, of which the following is a specification.

My invention relates to an improvement in printing-plates designed particularly for printing mailing-lists for newspapers and other periodicals; and it consists in certain novel features, hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a column of printing-plates embodying my improvement and my improved device or holder for securing the same together. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a longitudinal sectional view of the same. Fig. 4 is a perspective view of a modified form of my invention.

In preparing my printing-plate, I take a plate of metal, preferably zinc, of suitable length and breadth, and dip the same into melted wax, paraffine, or any preparation which will resist the action of the acids, and thereby coat it with a film of wax or such other preparation. The plate is then secured in an engraving-machine, such as described in my pending application, No. 294,296, for Letters Patent of the United States, and the inscription, character, drawing, or symbol desired is engraved on the plate through the wax film. The plate is then immersed for a suitable length of time in nitric acid, which deepens the engraving and removes the burr left by the cutting-tool, but does not attack those portions of the plate which are covered with the wax film. The ends B of the plate when being secured to the respective holder are then bent under the same and extended inward toward each other and serve to form grooves C under the plate, as will be readily understood.

D represents a bar or holder, of suitable length, breadth, and thickness, on which the plates A are arranged transversely, the downturned ends of said plates engaging the lower side of the said bar or holder. A loop E is arranged on the same and caused to bear against the lowermost plate of the column,

and between the lower side of the said loop and the lower side of the bar or holder is fitted a wedge-shaped key F, by means of which the loop may be tightened on the bar or holder, and thus caused to secure the printing-plates firmly in place thereon. The ends of the holder or bar are bent downward at right angles, as at G, and lips H are cut in the said downturned ends and bent inward at right angles therefrom and parallel with the lower side of the bar or galley.

I represents a supporting base or block, of such a thickness as to render the printing-plates type high when the latter are secured on said blocks or base. The same is provided in its upper side with longitudinal grooves K, and the length of said block or base is equal to the distance between the downturned ends G of the bars or holder. The latter are arranged side by side on the block or base, with their downturned ends engaging the ends thereof and with their lips H engaging the ends of the grooves K, the said bars or galleys and the printing-plates thereon being thereby so firmly secured to the block or base that impressions may be printed from the plates in a proof or other suitable press.

In Fig. 4, I illustrate a modified form of my invention, in which the holder L is of rectangular shape and composed of a pair of side bars M and cross-bars N, connecting the same at their ends. The ends of the printing-plates are bent under the bars M, thereby securing the printing-plates transversely on the galley, and screw-clamps O are arranged on the bars M and caused to bear against the lowermost printing-plate to lock the column of plates firmly on the galley. The base-block P fits between the bars M of the galley, bears under the printing-plates, and has transverse grooves R in its upper side near its ends, which receive the bars N, the galley being thereby firmly secured on the block or base. Printing-plates thus arranged and mounted will be found particularly serviceable for printing mailing-lists for newspapers and other periodicals; but the same may be also employed for other purposes.

Having thus described my invention, I claim—

1. The combination of the bar or holder, the printing-plates arranged thereon and having

their ends bearing under the bar or holder the loop adapted to slide on the latter, and the device to clamp the loop to the galley, substantially as described.

5 2. The combination of the bar or holder having the downwardly and inwardly turned ends G H, the base-block having the recesses to receive the downwardly and inwardly turned ends G H, and the printing-plates secured on the former, substantially as described.

15 3. The combination, with the bar or plate and the series of printing-plates mounted thereon, of the loop E, loosely mounted on the plate, and the interposed wedge-shaped locking-key F, substantially as specified.

20 4. The combination, with the base I, having the opposite longitudinal recesses or grooves K, of the opposite holders D, having the downwardly and inwardly turned ends to engage the recesses or grooves, and the printing-plates A, having their opposite ends folded, as at B, forming grooves C, receiving the opposite edges of their respective holder, substantially as specified.

25 5. The combination of the supporting base or block I, of such a thickness as to render

the printing-plates type high, and the bar or holder D, extending longitudinally along the upper face of the base or block and having its ends bent down to provide lips H, which engage recesses in the base or block.

6. The combination of the base or block I, the bar or holder D secured thereto, and the printing-plates having flexible ends which are adapted to be bent down under the bar D and between it and the base or block, as set forth.

7. The base or block I, having the grooves K combined with the bars D, removably fitted on top of the block so as to cover the grooves and having their ends bent downward, as at G, and lips H, cut in the said downturned ends so as to engage the grooves, and the printing-plates A, having their flexible ends bent down, as at B, so as to engage around and under the side edges of the bars D, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THEOPHILUS CHARLES EBERHARDT.

Witnesses:

J. H. RICHTER.

J. D. TERRY.