(No Model.)

## T. P. HEINEMANN.

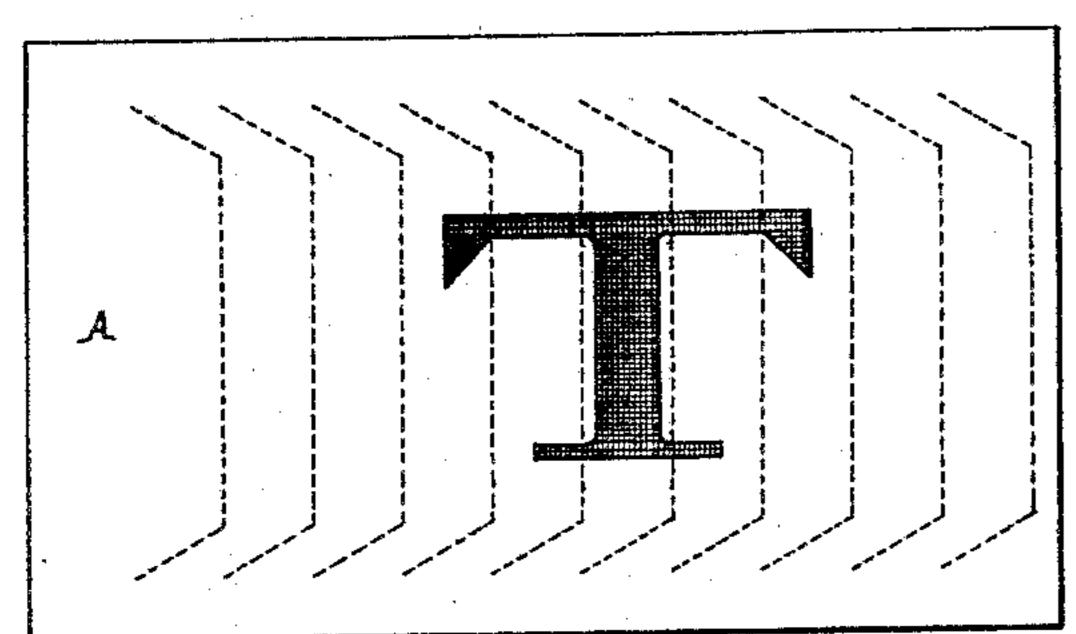
METHOD OF PRODUCING VARIABLE SIGNS AND ADVERTISING CARDS.

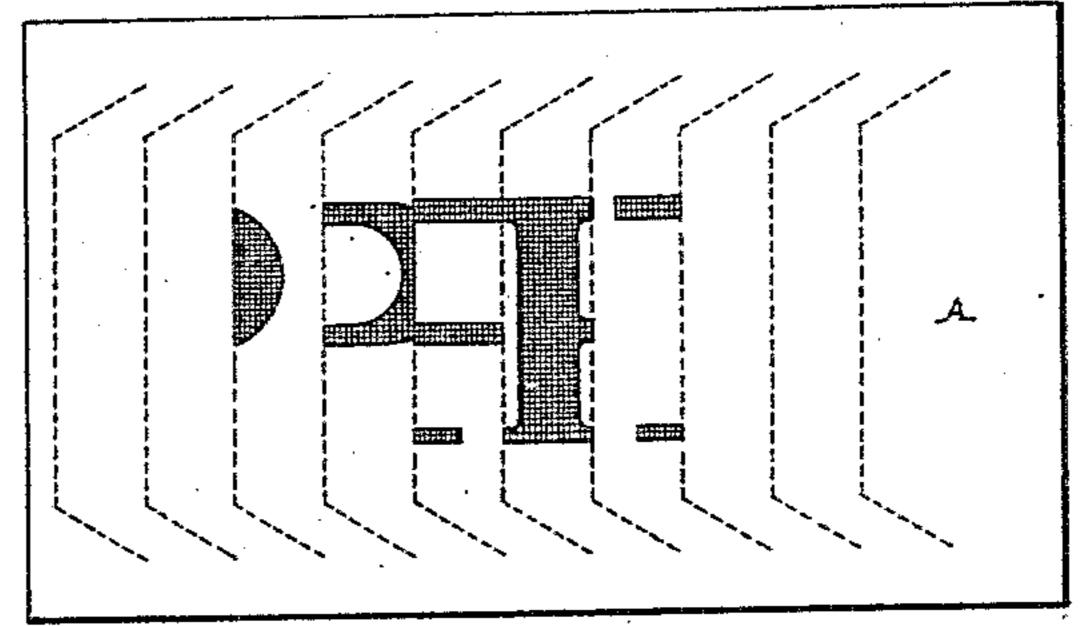
No. 401,165.

Patented Apr. 9, 1889.

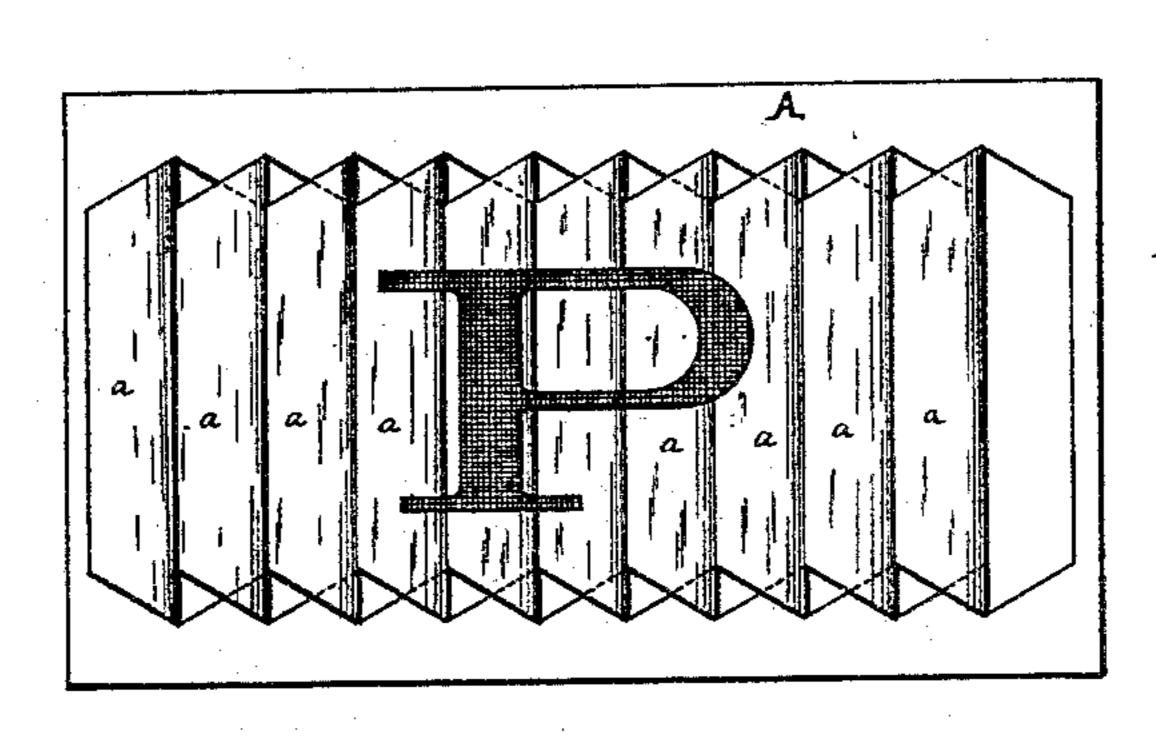
F15.1.

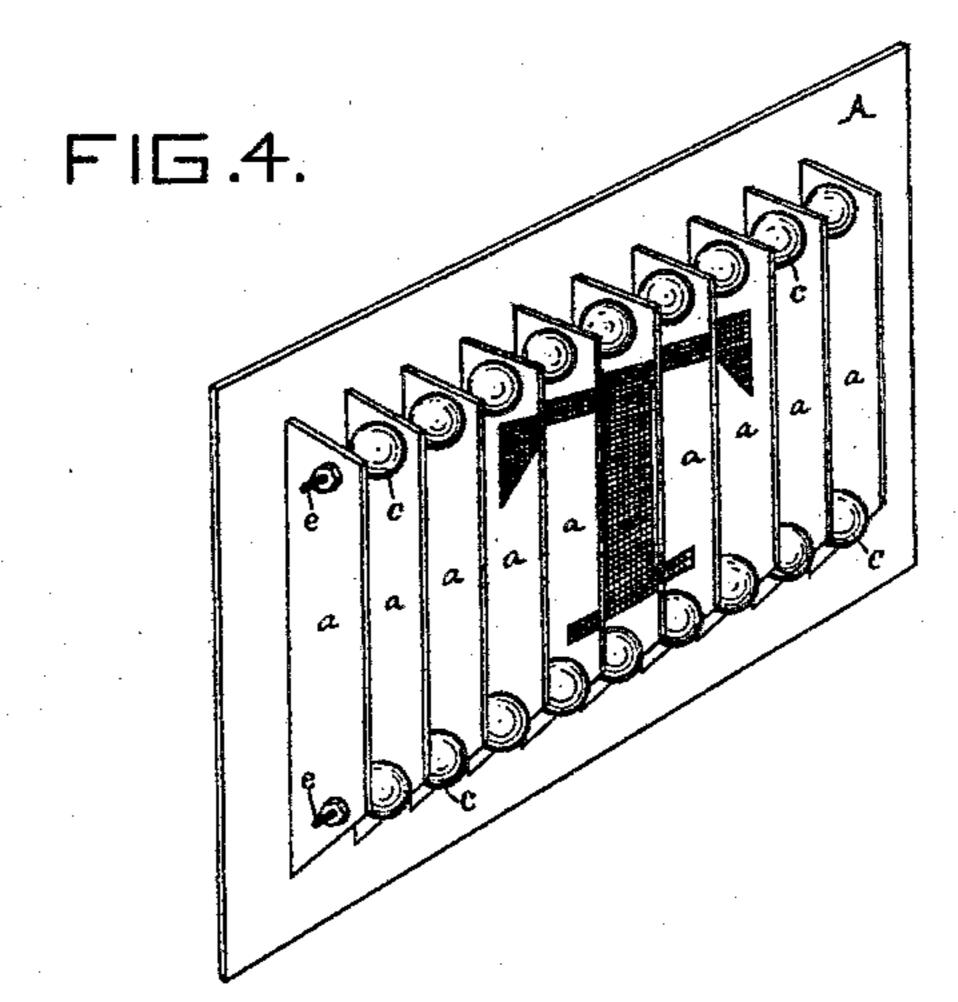
F15.2.





F15.3.





Mitnesses Thank L. Millward. M. D. Muniay

Theodore J. Leinemann y his attorney GETMorray

## United States Patent Office.

THEODORE P. HEINEMANN, OF CONNERSVILLE, INDIANA, ASSIGNOR OF ONE-HALF TO FRANCIS T. ROOTS, OF SAME PLACE.

METHOD OF PRODUCING VARIABLE SIGNS AND ADVERTISING-CARDS.

SPECIFICATION forming part of Letters Patent No. 401,165, dated April 9, 1889.

Application filed July 2, 1888. Serial No. 278,813. (No model.)

To all whom it may concern:

Be it known that I, THEODORE P. HEINE-MANN, a citizen of the United States, and a resident of Connersville, in the county of 5 Fayette and State of Indiana, have invented a certain new and useful Method of Producing Variable Signs, Advertising - Cards, &c., of which the following is a specification.

This invention is an improved method of preparing slatted fronts for variable signs, such as shown in my application, Serial No.

354,360, filed November 5, 1887.

The invention consists, essentially, in forming the characters or design regularly upon one side of a thin plate, strip, or sheet, and irregularly upon the opposite side of the same, then severing the sheet or strip into slats, and turning the slats at rights angles to the position they originally occupied.

In the accompanying drawings, Figure 1 is a plan view of the plate or strip after the characters are painted or formed upon it. Fig. 2 is a view of the reverse side of the plate, having the design upon it which forms the character "P," which shows when the slats are severed and turned to project from the opposite or front side. Fig. 3 is a plan or diagram illustrating the method of obtaining the characters or designs for the rear of the plate or strip. Fig. 4 is a perspective view of the completed front, showing one of the characters when looking at the sign diagonally.

To illustrate my design or card I have selected the two letters, T and P, the T to show upon one side, and the P to show upon the opposite side of the slats when severed and

turned out.

The plate or strip A may be of thin sheet metal or other suitable material. The letter 40 T, which may represent any desired character or design, is printed, painted, or otherwise formed upon one side of it, as shown in Fig. 1, and the characters which form the letter P formed upon the opposite side, as seen in 45 Fig. 2.

The method of preparing the design for the back of the plate is as follows: A pattern-sheet, as Fig. 3, the same size as the proposed sign, is regularly spaced, as shown by dotted through these lines and the slats a turned around nearly a half-revolution until they lie down flat upon the front of the plate.

The letter P is then formed upon the upturned faces of the slats, as seen in Fig. 3, after which 55 the slats are turned back to their original position, when the back of the pattern appears as in Fig. 2. These characters are transferred to the block or matrix in the usual way. It will thus be seen that when 60 the characters are printed upon both sides of the strip the sign-front may be completed by a single operation of a drop-press having suitable dies to sever the slats and at the same time turn them out at right angles to the 65 plate.

In Fig. 4 I have shown ornamental balls or beads c held between the slats by wires e passing through the slats and beads. This form of sign without the back plate makes a 70 very attractive window-card. Being hung up inside of the window, it shows from two sides without appreciably obstructing the light. For this kind of sign the slats may be entirely severed, the balls e and wires e serving 75 to hold the slats in proper position and relation to each other without the aid of the up-

per and lower strips.

I claim—

1. The method of preparing slatted vari- 80 able signs by first in so forming the required designs or characters upon both sides of a strip or sheet of metal or other suitable material that the character will appear regular when the slats are turned at a right angle, then 85 severing or partially severing the said sheet to form slats.

2. The method of preparing slatted fronts for variable signs which consists of the following steps: first, in forming one of the required designs or characters regularly upon one side of a plate of sheet metal or other suitable material; second, in so forming the second designs or characters required upon the opposite side of the plate that they will 95 appear regular when said plate is severed into slats and the slats turned at a right angle; third in partially severing the said plate to form slats and turning said slats at a right angle to the plate, substantially as shown and 100 described.

THEODORE P. HEINEMANN.

Witnesses:

DAVID W. McKee, George L. Gray.