## I. Crossley. Block for Carnet Printing. Nºº 106,468. Patented Aug. 16,1870. Fig. 1.

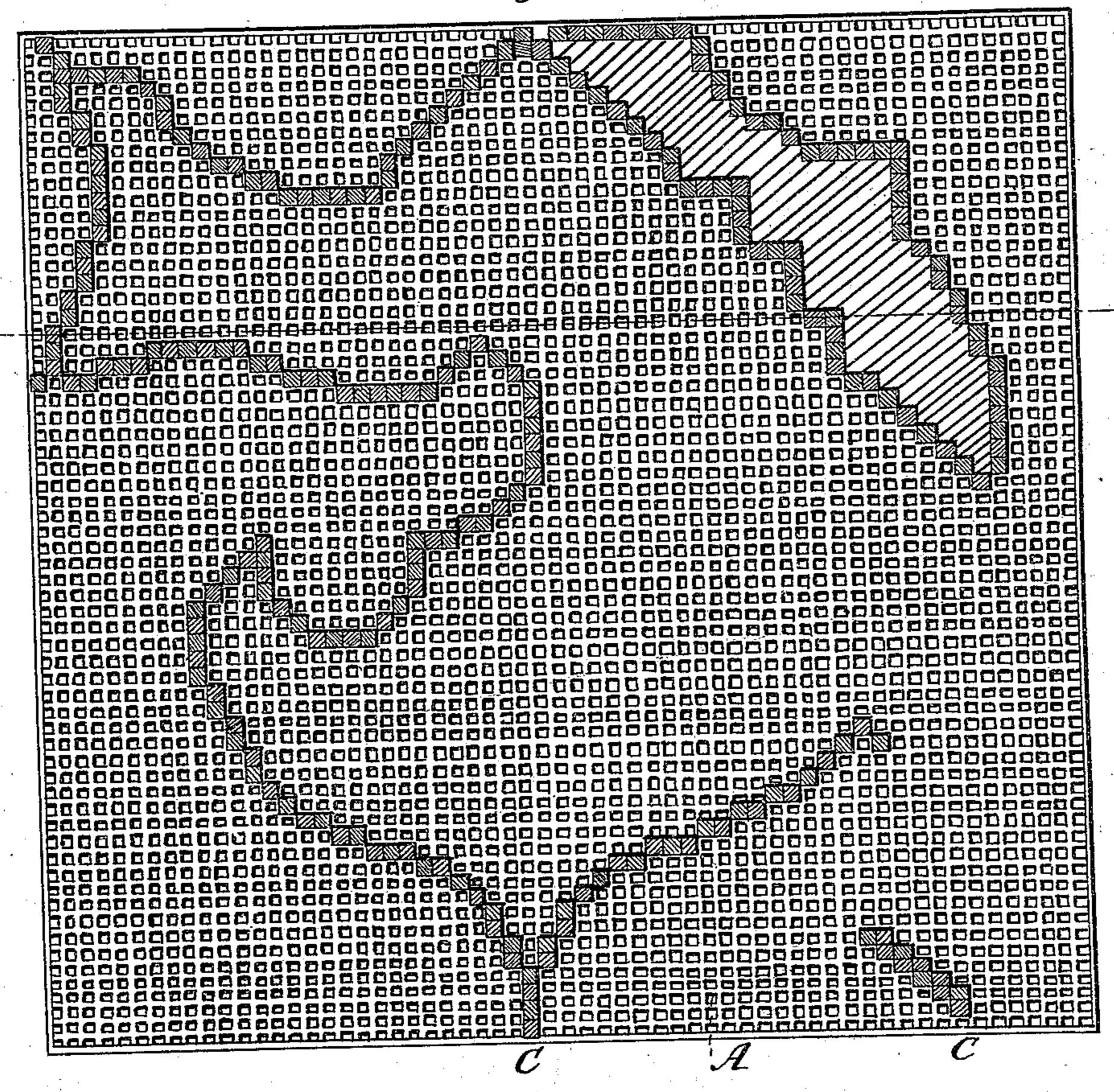
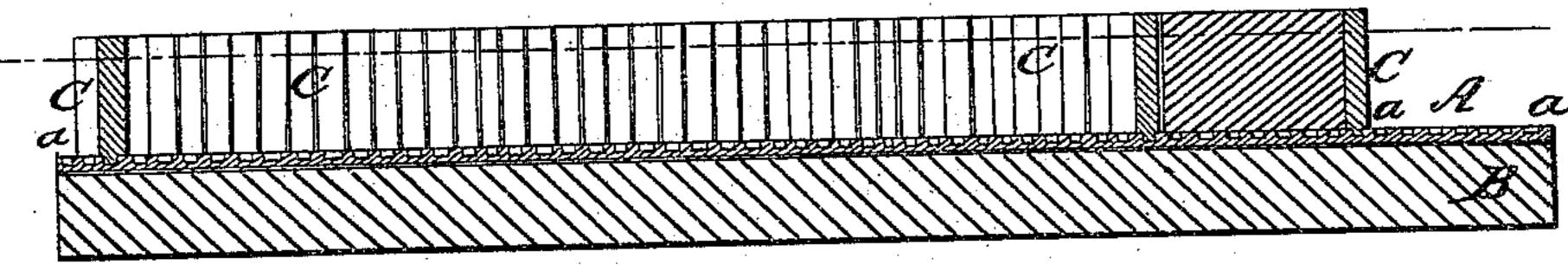


Fig. 2.



Witnesses. A. Ruppers Helphagere I. Lerofiley Inventor. Dy. Adleway & Co Atty.

## Anited States Patent Office.

## THOMAS CROSSLEY, OF BRIDGEPORT, CONNECTICUT.

Letters Patent No. 106,468, dated August 16, 1870.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, THOMAS CROSSLEY, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented an Improvement in Blocks for Printing Carpets; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making part of this specification, in which-

Figure 1 is a plan view of a sheet of metal, as it appears after having been prepared for the reception of the pegs or types, showing also a portion of such

types in position.

Figure 2 is a vertical sectional elevation, showing the types in position upon the plate, and the plate as secured to a block of wood or other material.

Blocks for printing carpets and other fabrics have heretofore been constructed of wood, gutta-percha, and metal, with the figures which they were intended to print engraved or otherwise formed upon their lower surface.

They have also been formed by preparing blocks of metal with surfaces as large as the figure to be printed, and then, by means of machines constructed for the purpose, drilling holes in one face of such blocks for the reception of the types, into which a round projection upon the upper ends of such types was driven. Those made of metal have sometimes been electrotyped, as set forth in a patent granted to me on the

1st day of November, 1859.

All of the above-referred-to blocks have been found to be objectionable: The wooden ones from the fact that larger lines would invariably be made upon the. fabric than was intended, or lines larger than the surface which was presented to such fabrics; the guttapercha ones from the fact that great difficulty was experienced in forming them with the perpendicular sides, so necessary to enable them to penetrate the fabric for a distance sufficient to carry the colors to the proper depth therein; the electrotyped metallic ones-which have been found to be greatly superior to all that had preceded them-from their great cost, and the length of time required in their preparation; those consisting of blocks of metal with holes drilled in them for the reception of the pegs or types, because of their great cost, it requiring expensive machinery for drilling such holes, the weight of the block being also objectionable, especially in hand printing.

My object in the present invention is to provide a simple, cheap, and durable block, which shall be free from all the objections urged against previous ones;

and to this end

It consists in constructing a block for printing carpets and other fabrics, by the use of a sheet of any suitable metal, having perforations in it, or indentations in one of its surfaces for the reception of the types or pegs while to its opposite surface is attached

a backing of wood, gutta-percha, or any other suitable substance, as will be more fully described hereinafter.

A, in the drawing, represents a sheet of metal, which is to be of suitable thickness to admit of the types being soldered to it, and which, for convenience, it is proposed to lay or mark off into squares, as shown in fig. 1. In the center of each of these squares, or so many of them as is necessary, there is to be formed a small hole or indentation, for the reception of the end of the peg or type, or of a tenon or rounded projection formed thereon. When the plate is provided with apertures which extend all of the way through it, the types should be provided with the projections. above alluded to; but when it is provided with indentations only, as shown in fig. 2, the ends of the types may be made to rest in such indentations, and the reduced portion projecting therefrom may be dispensed with.

This portion of the device may consist of a sheet of any kind of metal to which types can be soldered, and it may be prepared for the reception of such types, either by being drilled or punched; but, when indented only, it may receive all of the impressions from a block or stamp prepared expressly for that pur-

pose.

When the sheet of metal has been prepared for the reception of the types C, they are to be inserted into so many of the holes or indentations as are necessary to produce the figure which it is desirable to print. When the position of the types has been determined, and they have been placed therein, they are soldered fast to the plate, which will give the outline of the figure, after which any portions of the spaces between such types may be filled with solder or other metal, so as to cover as large a space upon the fabric as is desirable; or such spaces may be filled with leather, gutta-percha, or other elastic substances.

B represents the backing of wood, gutta-percha, or other suitable material, upon which the plate A is to

be fastened in any suitable manner.

C C represent the pegs or types, they being shown in fig. 2, as inserted into indentations formed in the plate A. It will be apparent that, after they have been secured as there indicated, the spaces between them may be filled with any suitable substance which will give them permanency, and that this filling may extend for any desired distance from the point where they are united to the plate toward their outer ends.

a a represent the indentations for the reception of the types.

The operation of this device will be apparent. It having been constructed as above described, it is

to be attached to a printing-machine, or taken in the hands of the operator and placed upon the inking or coloring-form, in order that the ends of the types may be covered with such matter, after which it is to be removed to the position where the figure is to be printed, when it is to be lowered upon the fabric and pressed down thereon, either by its own weight or by some other means, until the coloring matter has been transferred to such fabric, where it will leave its impression, after which it is to be carried back to the coloring-form for a fresh supply.

I have described this device as particularly adapted to the printing of carpets, but it is equally adapted to

the printing of other fabrics.

I am aware that blocks for the purpose to which I propose to apply mine have heretofore been made, consisting of plates of metal having perforations for the ends of the types, and also, that various substances have been used as backing for blocks and for the same purpose, I do not, therefore, claim either of the devices named in this specification respectively or dually; but

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

A block for printing carpets and other fabrics, combining in its construction a sheet of metal, which is provided with perforations or indentations for the reception of the types, a backing of wood, or other equivalent substance, to which the plate is attached, and the types or pegs for giving the impression, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing

witnesses.

THOMAS CROSSLEY.

Witnesses:
WM. E. SEELEY,
ALEX. HAWLEY.