

(No Model.)

C. M. GREEN.
PERFORATING DEVICE.

No. 556,051.

Patented Mar. 10, 1896.

Fig. 1.

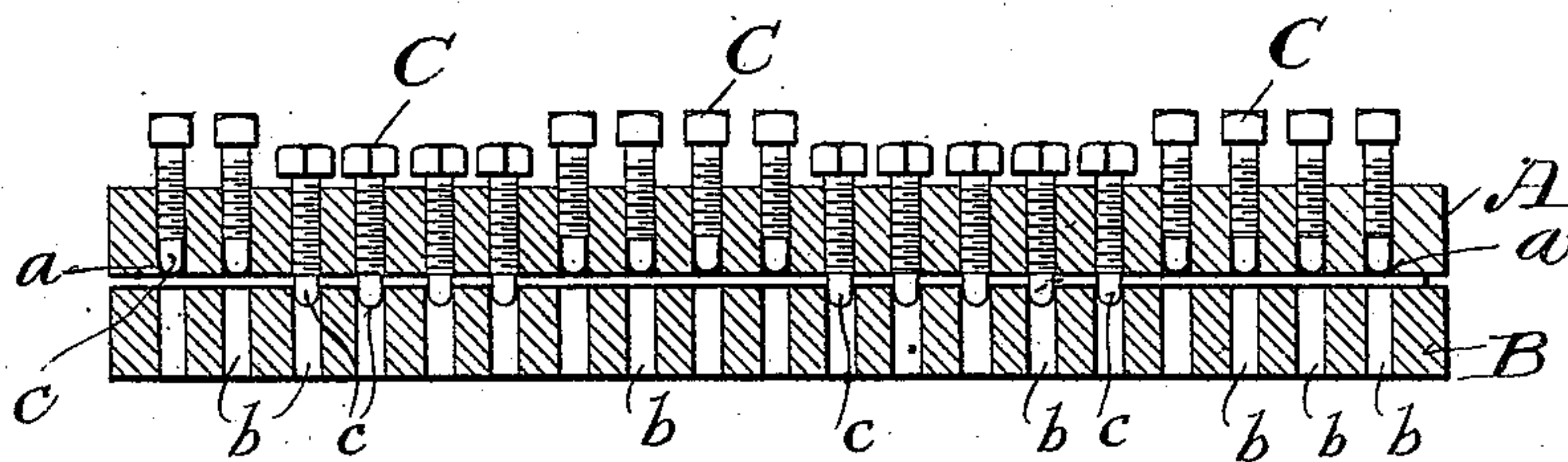
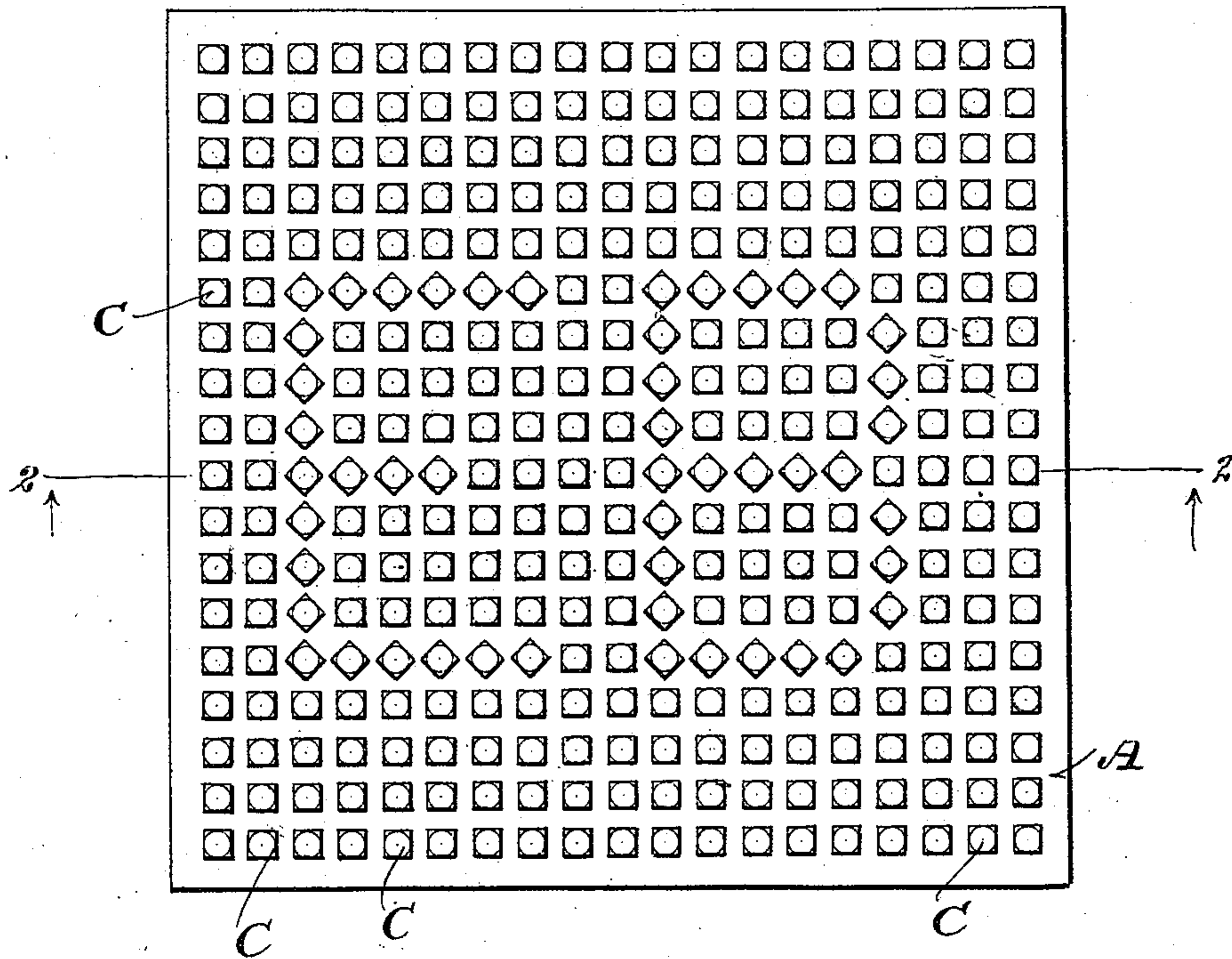


Fig. 2.

Witnesses:

Geo. W. Loring.
L. H. Lott

Inventor:

Charles M. Green.

By H. G. Underwood.

Attorneys

UNITED STATES PATENT OFFICE.

CHARLES M. GREEN, OF HIGHLAND PARK, ILLINOIS.

PERFORATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 556,051, dated March 10, 1896.

Application filed July 1, 1895. Serial No. 554,535. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. GREEN, a citizen of the United States, and a resident of Highland Park, in the county of Lake and State of Illinois, have invented certain new and useful Improvements in Perforating Devices; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to devices for perforating or forming holes in wood, pasteboard, fiber, veneer, wood pulp and other substances; and it consists in certain peculiarities of construction and arrangement of parts for accomplishing this result and for varying the arrangement of the said perforations to form any design preferred with the same bed-plate and follower, all as will be hereinafter more fully set forth and subsequently claimed.

In the drawings, Figure 1 is a plan view of the follower and operating screw-bolts forming part of my present invention. Fig. 2 is a vertical transverse section therethrough on the line 2 2 of Fig. 1, showing also the bed-plate beneath the follower.

As my invention is capable of use in a stamping-press of any suitable construction, I have not deemed it necessary to illustrate any portion of such press, but merely show the operative portions of my device.

Referring to the drawings, A represents the follower, consisting of a sufficiently heavy plate of any suitable metal, preferably steel, smooth and level upon its under side and tapped, as shown, through practically its entire area with vertical screw-holes *a a*, placed preferably at equal distances apart and quite near together.

B represents the bed-plate of like material, smooth and level on its upper surface and provided with corresponding perforations *b b*, registering exactly with the screw-holes *a a* in the follower, but the perforations *b b* being smooth-bored.

C C designate the operating screw-bolts, formed with suitable heads, preferably polygonal, as shown, for ease in manipulation, as by any suitable wrench or other tool, and having shanks screw-threaded for the greater portion of their length, but terminating in

punching ends *c*, adapted to fit within the perforations *b* in the bed-plate B when the said screw-bolts have been sufficiently screwed down for this purpose, as shown in Fig. 2.

The operation of my invention will be readily understood from the foregoing description of its construction, taken in connection with the accompanying drawings. The bed-plate B is supported in the ordinary manner upon the frame of the stamping-press, and the follower A is firmly secured to the vertically-moving parts of the press above the bed. Then let it be supposed that it is desired to punch out certain initials in a sheet of fiber or veneer. Take, for example, the initials "E. B." Enough of the screw-bolts C C to form these initials are screwed down, as shown in the drawings, and the sheet of material to be perforated is laid upon the bed-plate and power applied to the press to bring the follower down upon said bed-plate and the superimposed sheet, when the downwardly-projecting punching ends of the depressed screw-bolts will punch out the desired holes through the said sheet, the ends of the bolts extending into the perforations on the bed-plate, as shown in Fig. 2.

From the foregoing it is obvious that any design within the limits of the number of screw-bolts in the follower can be readily and quickly formed by merely screwing down the requisite screw-bolts, and my device is especially adapted, for instance, to the manufacture of perforated chair seats and backs, dispensing with the present expensive system of gangs of bits and like boring devices.

If necessary the material to be perforated can be steamed or otherwise softened, but in any event the entire design is perforated through the said material by a single downward movement of the stamping-press, and the design can be quickly varied, as desired, by merely screwing up or down the particular screw-bolts needed.

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

In a perforating device, the combination with a bed-plate, provided with a series of vertical smooth-bored holes, of a vertically-

movable follower provided with an equal number of vertical screw-threaded holes, registering with the holes in the said bed-plate, and each hole in the follower being provided
5 with a screw-bolt terminating in a punch end, substantially as set forth.

In testimony that I claim the foregoing I

have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.
CHARLES M. GREEN.

Witnesses:

H. G. UNDERWOOD,
C. W. SCOTT.