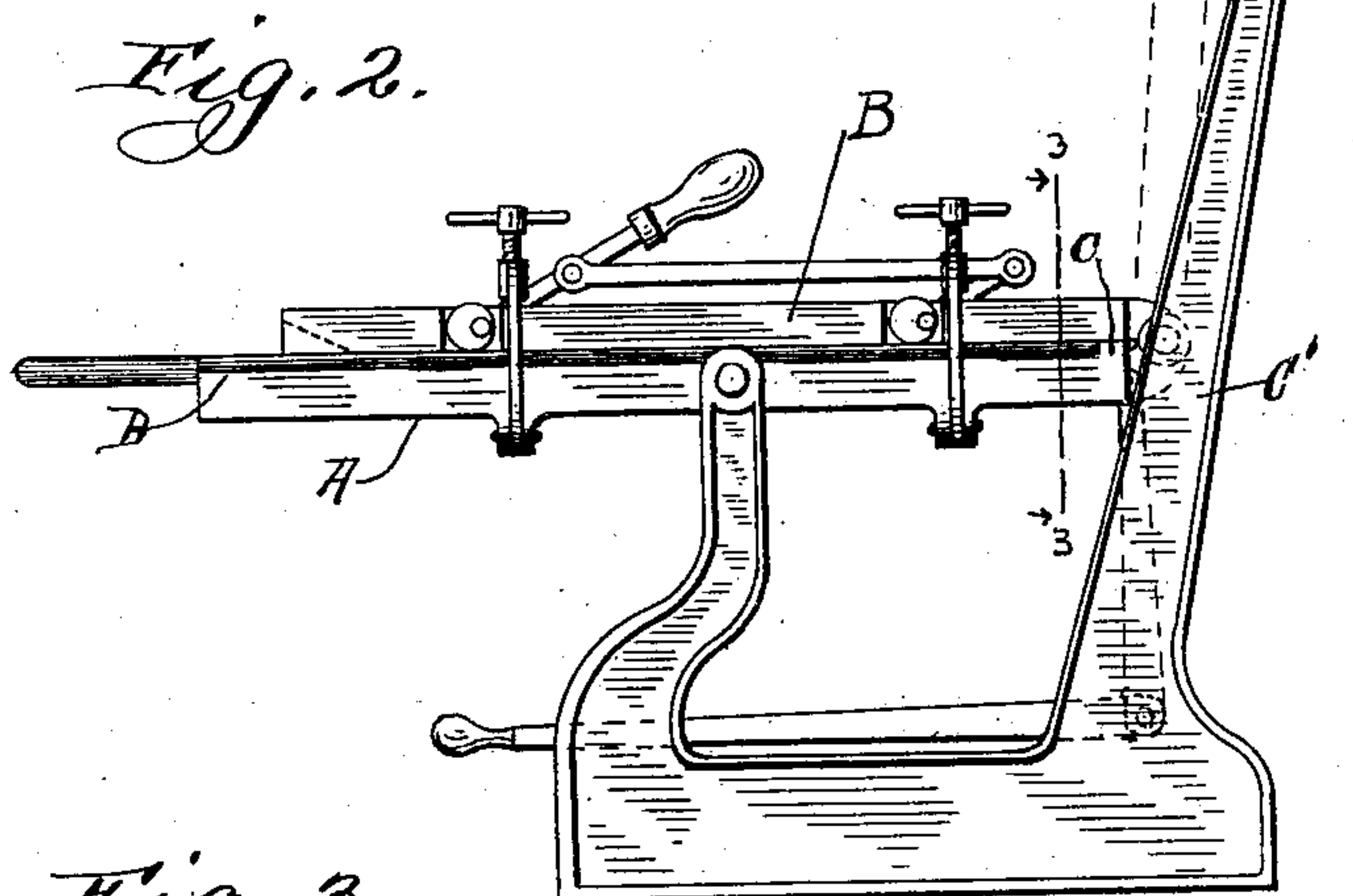
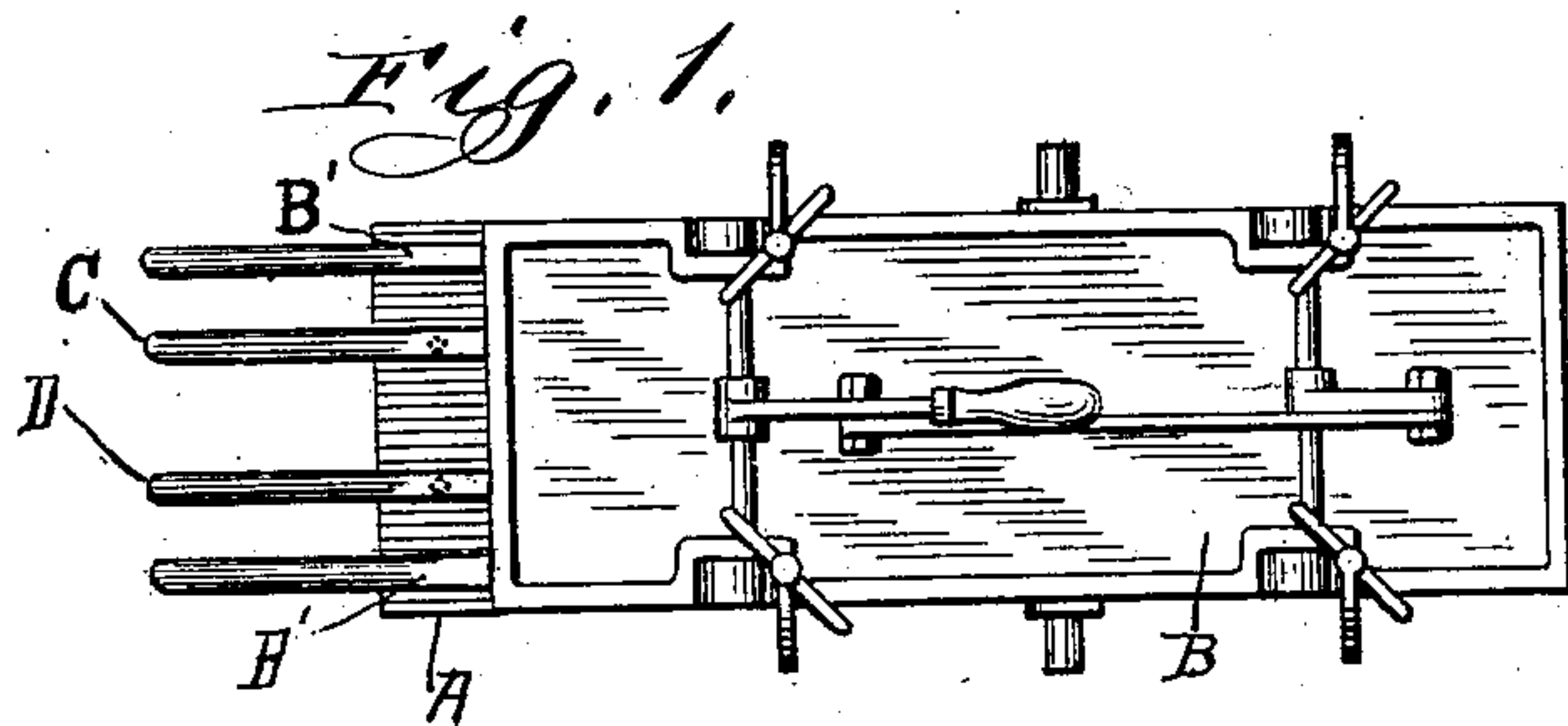


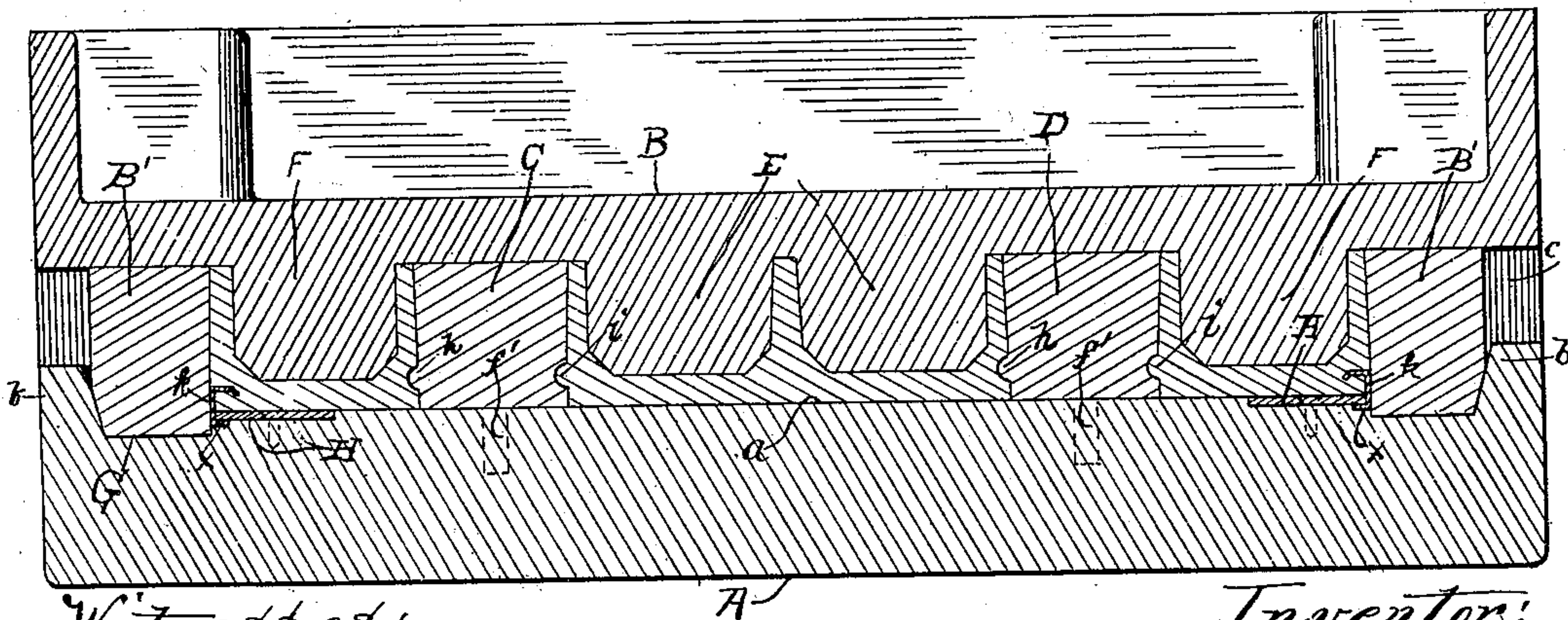
C. S. PARTRIDGE.  
STEREOTYPE CASTING BOX.

APPLICATION FILED JULY 3, 1901.

NO MODEL.



*Fig. 3.*



Witnesses:  
R. J. Jacker  
M. Friel.

Inventor:  
Charles S. Partridge  
By Frank D. Thompson  
Atty.



# UNITED STATES PATENT OFFICE.

CHARLES S. PARTRIDGE, OF CHICAGO, ILLINOIS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO PARTRIDGE & ANDERSON COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

## STEREOTYPE-CASTING BOX.

SPECIFICATION forming part of Letters Patent No. 735,804, dated August 11, 1903.

Application filed July 3, 1901. Serial No. 67,046. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES S. PARTRIDGE, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Stereotype-Casting Boxes, of which the following is a full, clear, and exact specification.

My invention relates to stereotype-casting boxes; and it is particularly adapted for casting sectional bases for stereotype-plates. The peculiar style of sectional bases to which my improvements are adapted is more fully described in an application for Letters Patent of the United States filed July 10, 1901, Serial No. 67,806, and the essential features of this style are the transverse expansibility of the base from one to several columns wide and the rigidly-held channeled clamping-strips forming part of the half-column-wide side sections.

It is the object and purpose of my invention to cast a complete set of parts of these sectional bases in such manner that the trimming of the sides of these parts will be unnecessary and when assembled they will make a compact support for the stereotype-plate in which there will be no lost motion. This I accomplish by the means hereinafter described, and as particularly pointed out in the claims.

In the drawings, Figure 1 is a plan view of a casting-box embodying the main feature of my invention. Fig. 2 is a side elevation of said box mounted on its frame. Fig. 3 is an enlarged cross-section taken on dotted line 3 3, Fig. 2, looking in the direction indicated by the arrows, showing the box closed and the base-sections formed therein. Fig. 4 is a plan view of the mold with the cover removed, showing the side and division bars in proper position.

Referring to the drawings, A represents the rectangular mold of a stereotype-base-casting box, and B the cover, preferably hinged thereto at one end. This box is provided with the usual clamping devices and is swiveled in a cradle or frame C' in the usual manner and is also fitted with the customary tilting levers and other common operating

means, the use of which, while necessary, form no part of my invention.

The upper or inner surface *a* of the mold A is perfectly plain, excepting that the marginal surfaces of its longitudinal side edges are raised to provide retaining-walls *b*, and at the base of the inner inclined sides of these retaining-walls corresponding longitudinal channels are formed, in which the removable longitudinal side bars B' B' are seated. The rear edge *c* of the mold next the hinges of the casting-box is raised to the meeting plane of the mold and cover, and the adjacent rear ends of the bars B' are made to bear as closely as possible against the same, substantially as shown. Arranged between and parallel with the bars B' and with each other on the casting-surfaces of the mold are removable spacing or partition bars C and D. These bars C and D have their rear ends provided with tenons *ee*, which enter corresponding recesses or mortises in the rear edge *c* of the mold and at points near the opposite or front edge of said mold are provided with dowels *f' f'*, which enter longitudinal slots *g* of the same width as said dowels in the forward edge of the mold.

The height of the bars B' B', C, and D are such that when the cover B is closed down over the mold, as shown in Fig. 2, and clamped thereto in the usual manner said bars are securely and rigidly held in place. The bars C and D are separated from each other a distance corresponding to the width of a column of newspaper matter and are separated from the bars B' one-half the width of such a column, the sides of the bars C and D facing each other and facing the sides of the bars B', and the inner sides of said bars B' are inclined slightly, so that the distance of space between said bars next the mold is greater than at the edges or angles thereof farthest from said molds.

The inner or casting surface of the cover is provided with a series of longitudinal ribs E E and F F, which project from a casting-surface which is on the same horizontal plane as the meeting of the cover with the mold when the two are locked together. The ribs E E project from the cover at such points that



when the casting-box is closed they enter the space between the partition-bars C and D of the mold, so that, together with said bars, they provide a casting-chamber for a column-wide section of base, substantially as shown in Fig. 3. The ribs F F are so located that when said casting-box is closed they enter the space between the bars B' and the bar D on one side and the bar B' and the bar C on the other side and form a casting-chamber for sections of base of a half-column width, substantially as shown in the drawings.

In order to cast interlocking recesses in one side of said base-section and corresponding recesses in the engaging surfaces of the other base-section cast by this stereotype-box, I have provided the left-hand side of the bars C and D with longitudinal beads *h h* at points near the casting-surface of the mold and have provided the opposite sides of said bars C and D with similarly-located corresponding longitudinal grooves *i i*. These beads and grooves may so far as the features of my invention are concerned be shaped as shown in the drawings or otherwise. A groove G is formed along each side of the mold A in its plane surface  $\alpha$  parallel to the central bars, with a depth below the surface  $\alpha$  equal to the height of the outer face of the projecting flange of a base-section-clamping strip *k* from the upper face of the base, as clearly shown in Fig. 3. The inner edge of said groove, in which the bars B' B' are seated, is rabbeted, and a plate H is secured in a depressed portion of surface  $\alpha$  of the mold next grooves G in such manner that its upper surface is flush with the plane  $\alpha$  and its edge overhangs the rabbeted portion of the groove G a distance equal to the width of the clamping-strip flange, thereby forming a retaining-slot  $x$ , in which the clamping-strip *k* may be secured in the position shown in Fig. 3, with its outer web-face against the bar B' and its other parallel flange projecting into the casting-chamber of the side sections, so that when the metal is poured in said chamber the channeled clamping-strip *k* is secured fast in said side sections of the stereotype-base. The outer or side bars B' are each formed with a beveled portion which is adapted to engage and bear against this inclined side of the groove, so that when the cover is clamped to the mold and the said bars forced into their seats they will be moved toward and made to clamp the channeled clamping-strips in position.

As hereinbefore stated, the sides of said bars B' B', C, and D are inclined to the surface  $\alpha$  of the mold at an angle somewhat less than ninety degrees, so that the inner or proximate sides of the bars lean toward the opposing bar. The main part of the base-section cast between these bars (in other words, their upper plate-supporting portion) extends in a continuous stretch from bar to bar. Consequently as the metal cools af-

ter being run into the mold the continuous or upper portion of the base thus cast shrinks most, so that the sides of the base-sections when removed from the mold are in a plane at right angles or perpendicular to the plate-bearing surface, and when assembled for use these sides bear flat against each other and form a rigid compact base.

What I claim as new is—

1. In a stereotype-casting box, the combination with the cover and mold, of parallel grooves formed in the mold-surface thereof near its side edges, whose sides are undercut, and side bars removably secured in said grooves, adapted to hold clamping-strips in engagement with said undercut sides.
2. In a stereotype-casting box, the combination with the cover and mold, of parallel grooves in the mold-surface near its side edges, whose sides are undercut, and side bars removably secured in said grooves and adapted to lock clamping-strips in engagement with said undercut edges, the outer inclined sides of the grooves forming guides to properly seat said bars.
3. In a stereotype-casting box, the combination with the cover and mold, of parallel grooves in the mold-surface near its side edges, whose sides are rabbeted, gage-plates secured in the rabbets, whose upper sides are flush with the mold-faces and whose inner edges overhang the grooves, and side bars seated in said grooves adapted to lock clamping-strip blanks in engagement with said plate edges.
4. In a stereotype-casting box, the combination with the cover and mold, of parallel clamping-strip-retaining grooves in the mold-face near its side edges, side bars removably seated in said grooves adapted to lock the clamping-strips therein, and partition-bars parallel to said side bars, removably secured to said mold-face, the sides of the side and division bars forming angles of slightly less than ninety degrees with the mold-face.
5. In a stereotype-casting box, the combination with the cover and mold, of parallel clamping-strip-retaining grooves, side bars removably seated in said grooves, adapted to lock the clamping-strips therein, and partition-bars removably secured on said mold-surface, whose outer sides are a half-column width from the inner sides of said side bars, and whose inner sides are a column width apart, said bar sides being adapted to form interlocking sides on base-sections, perpendicular to the bearing-surfaces thereof.
6. In a stereotype-casting box the combination with the cover and mold, of pockets of half-column and column width therein, and removable bars forming the sides of said half-column pockets, adapted to lock channeled clamping-strips therein.
7. In a stereotype-casting box, the combination with the cover and mold, of outer pockets of half-column width and inner

pockets of column width therein, removable  
partition-bars secured on the mold-surface  
between said pockets, and removable bars  
secured in said mold forming the outer sides  
5 of said outer pockets, the sides of said bars  
forming angles less than ninety degrees with  
the mold-face, and the outer bars forming

means to retain sheet-metal clamping-strips  
in said outer pockets.

CHARLES S. PARTRIDGE.

Witnesses:

M. FRIEL,

FRANK D. THOMASON.