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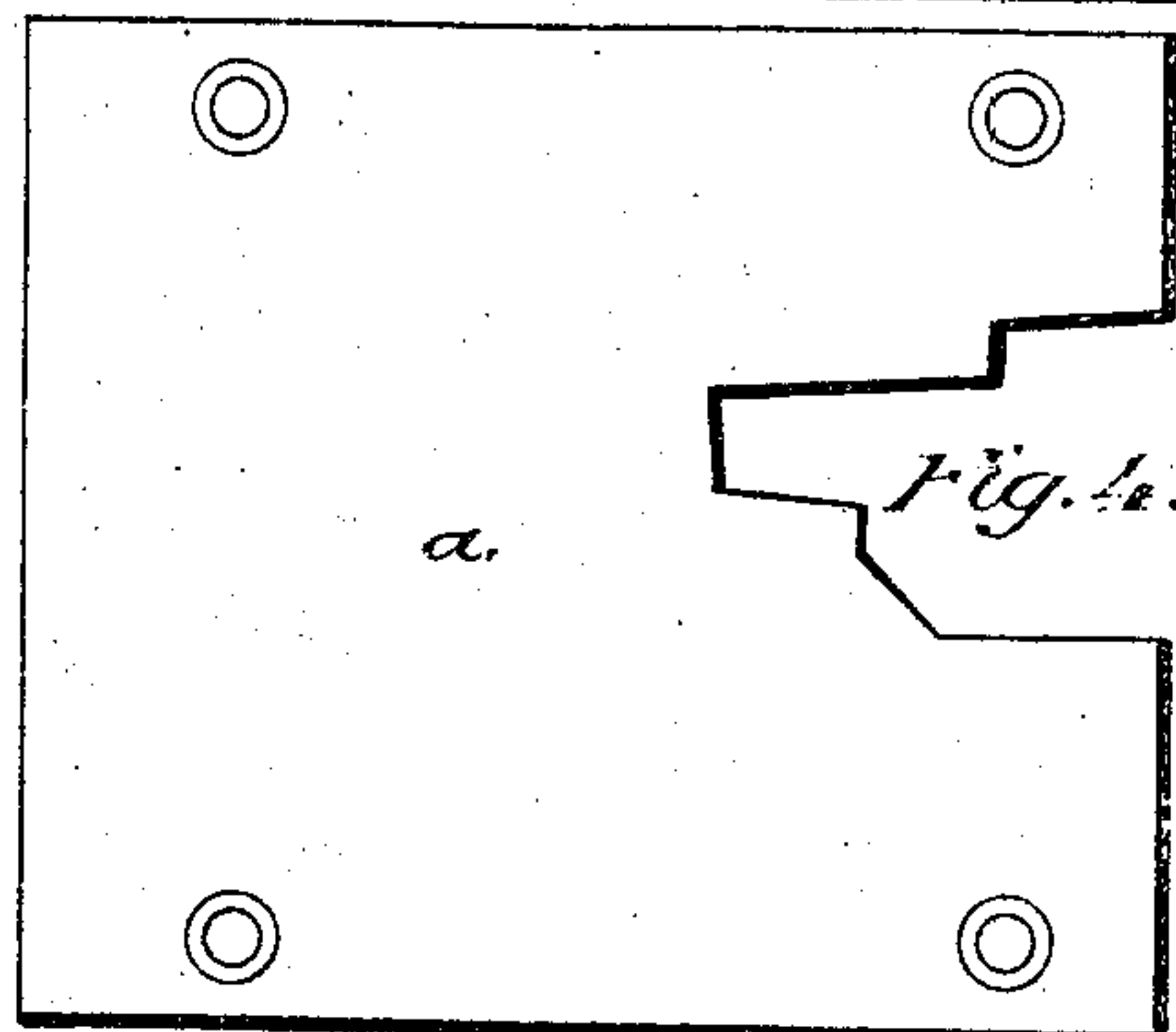
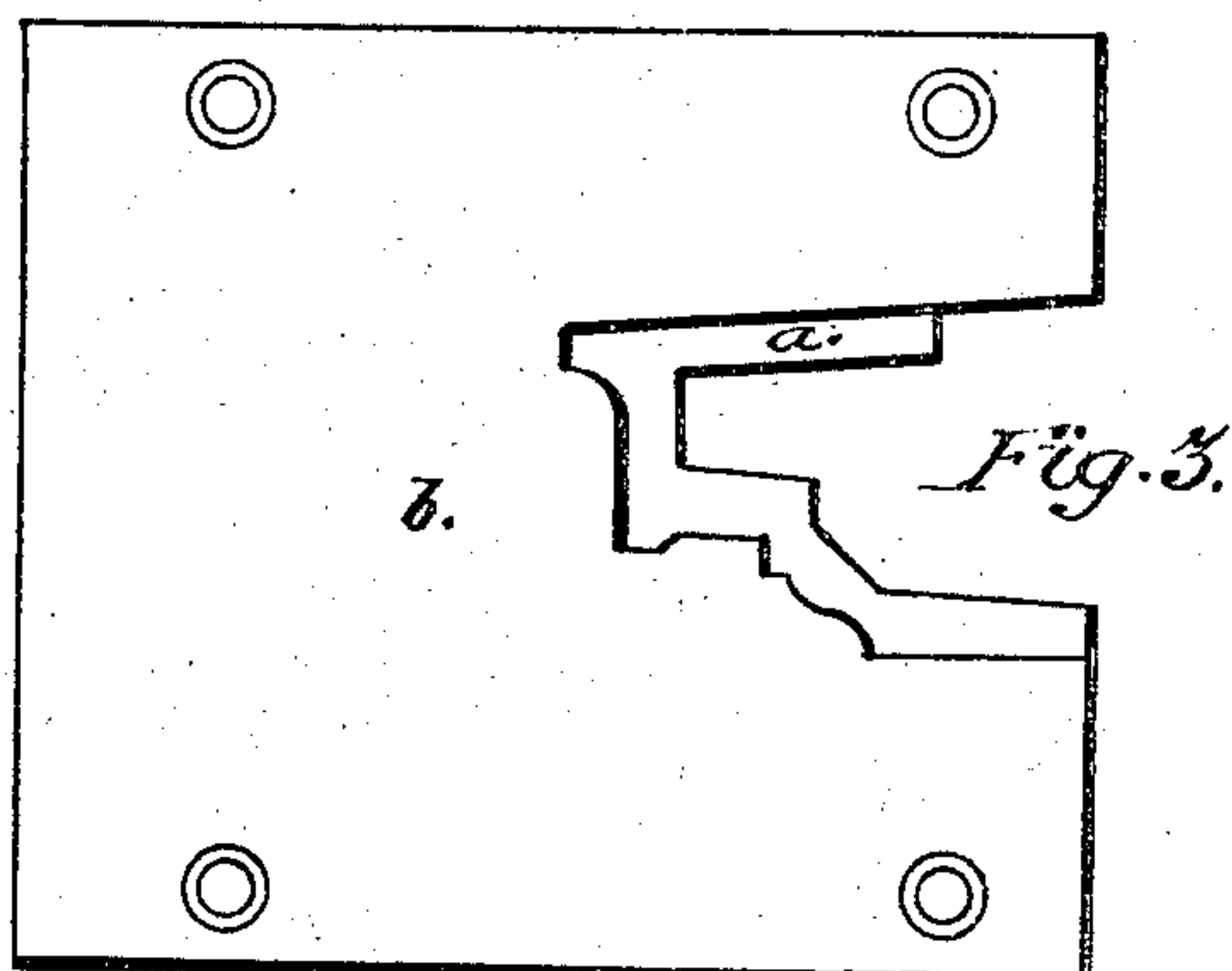
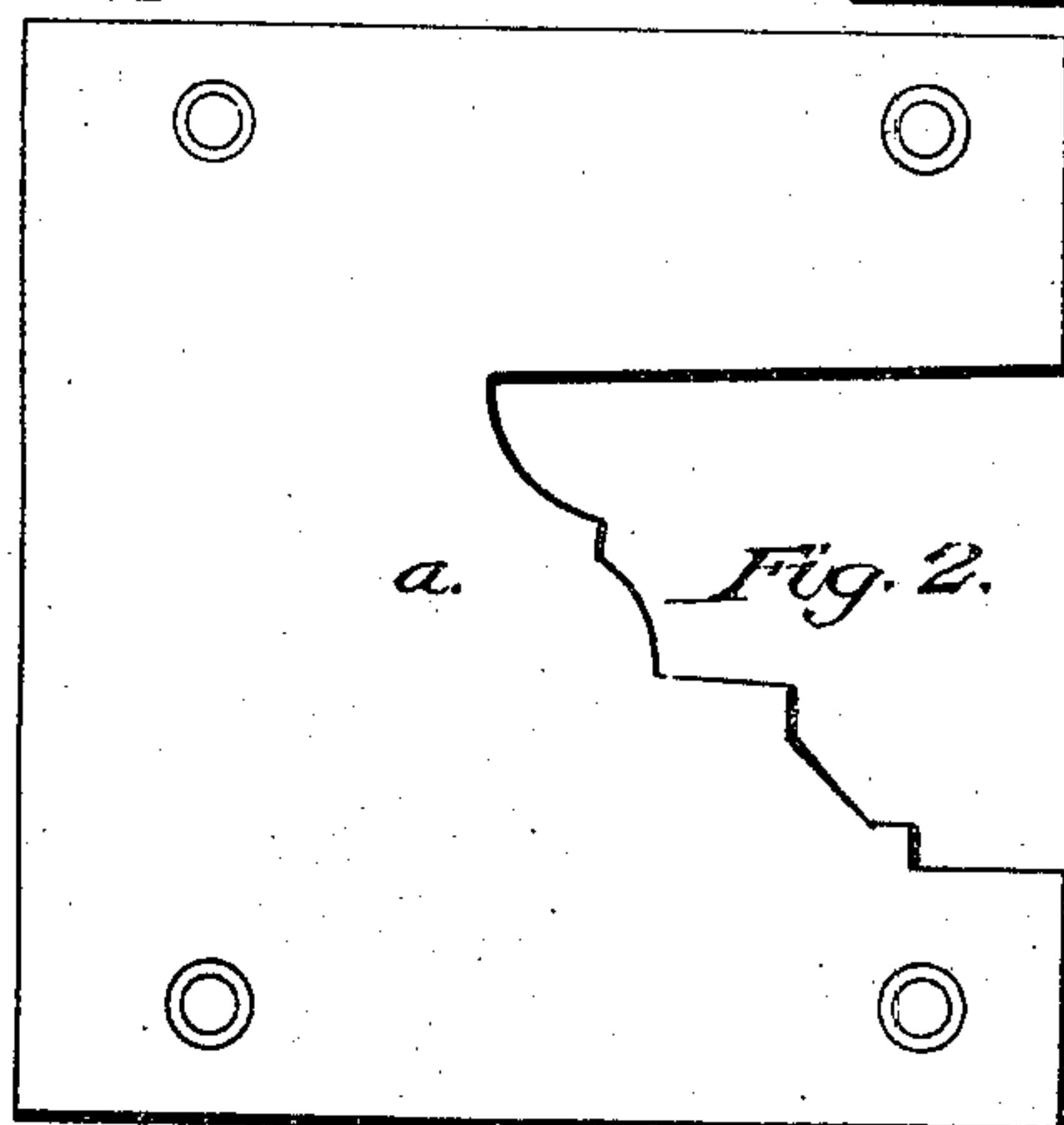
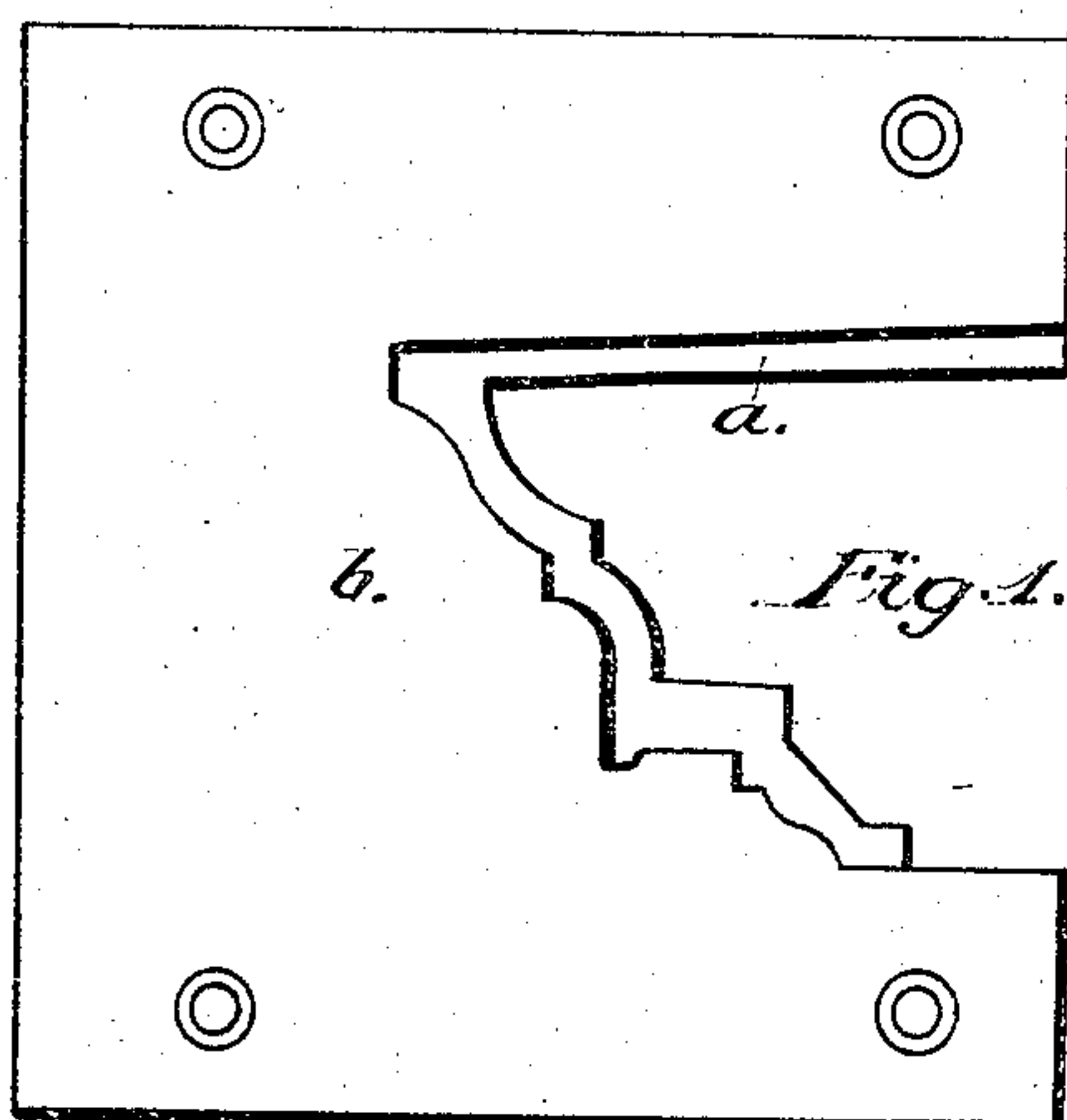
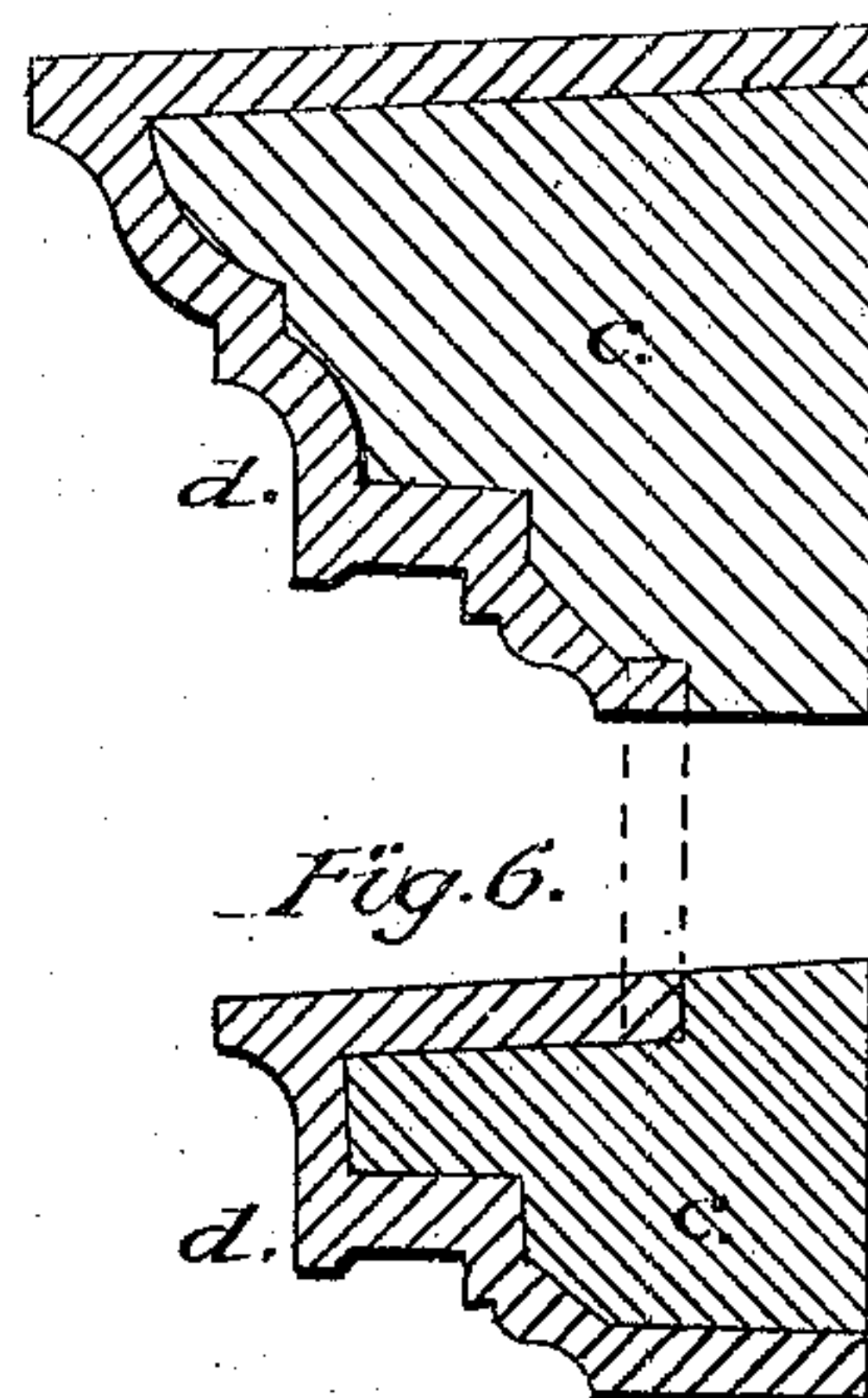
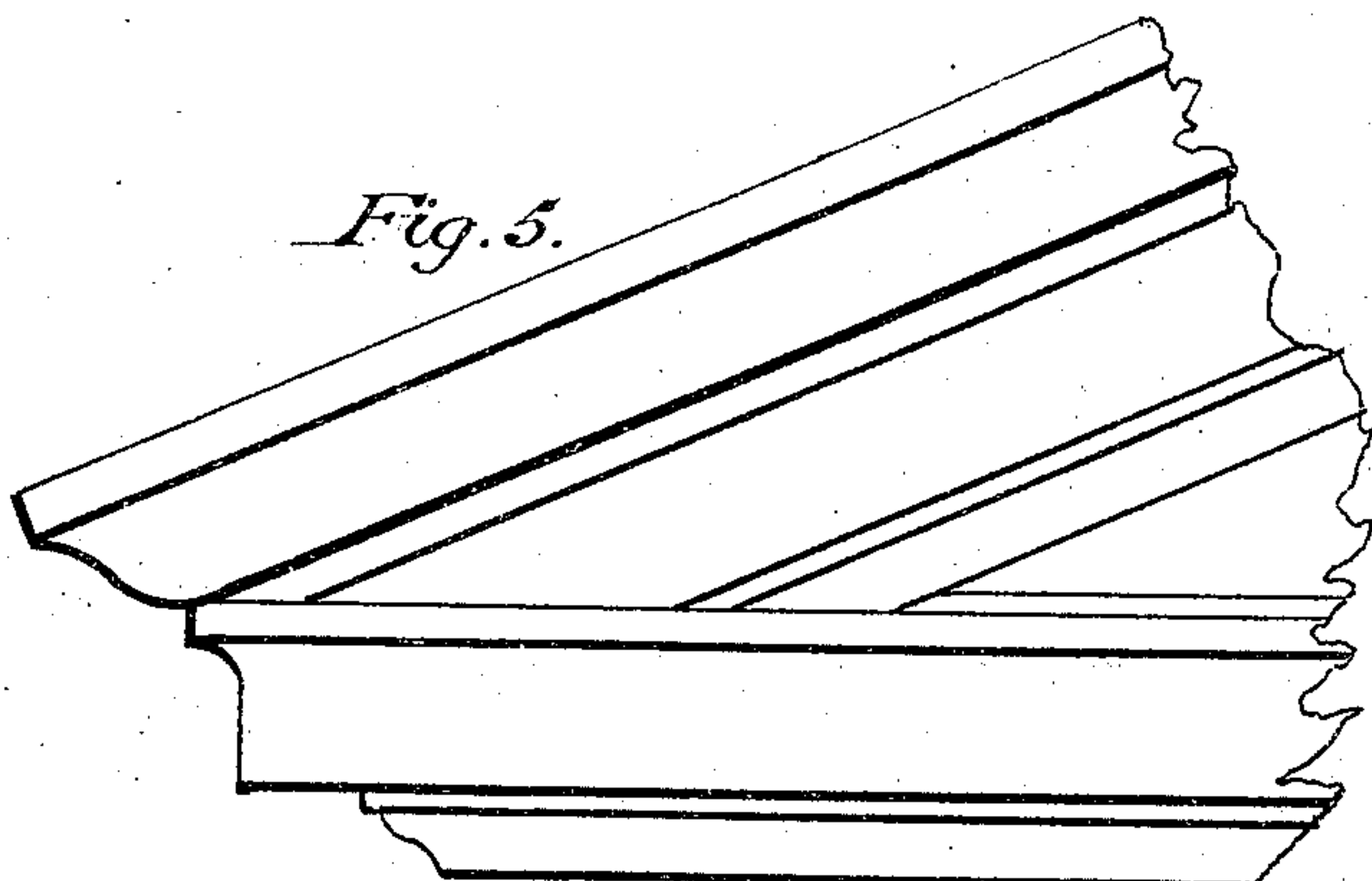
J. L. Jackson.

Pattern for Castings.

N<sup>o</sup> 103,888.

Patented Jun. 7, 1870.

Fig. 7.



Witnesses:  
Chas. H. Smith  
Geo. A. Walver,

Inventor:  
James L. Jackson,  
per L. W. Ferrell atty.

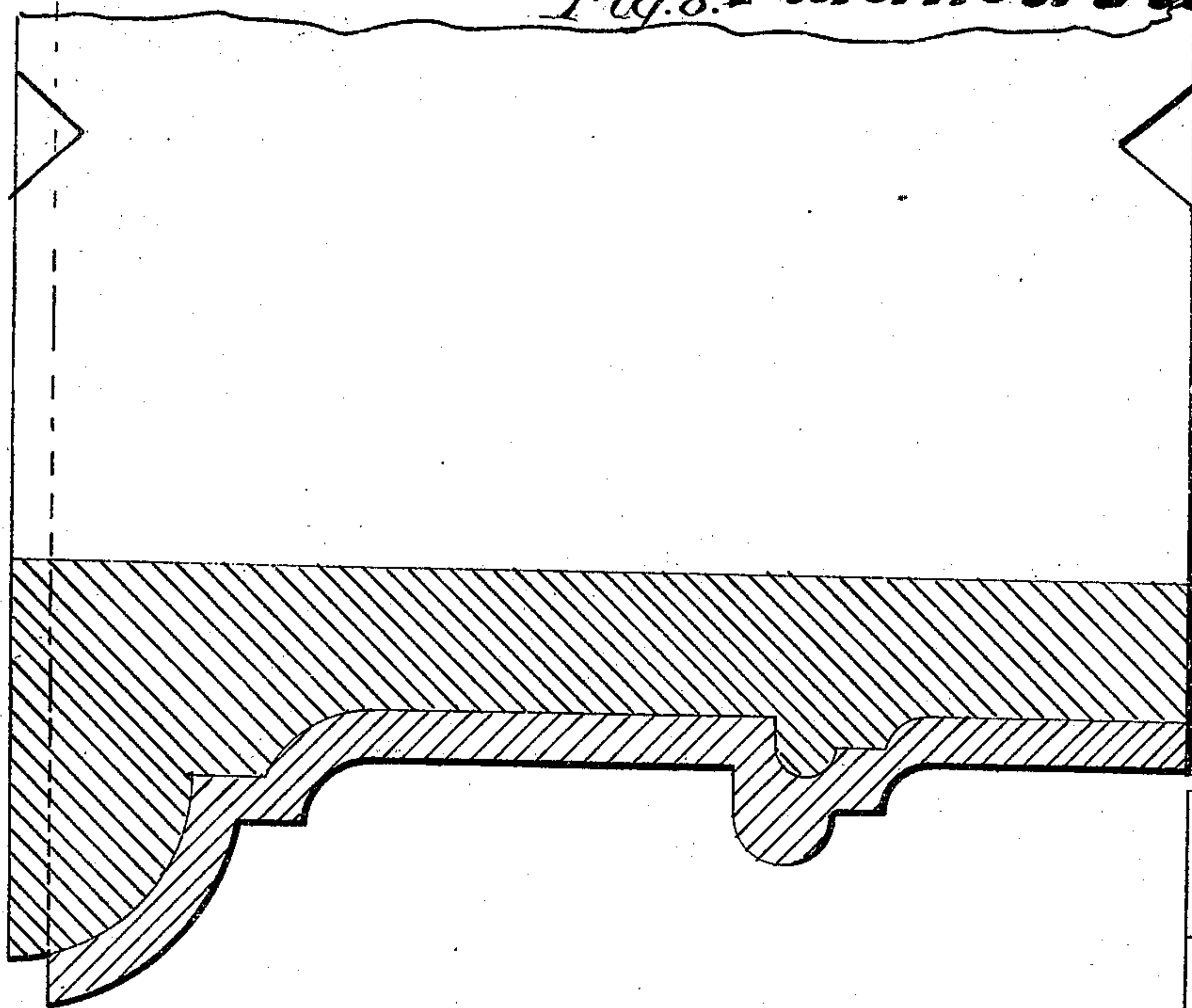
*J. L. Jackson.*

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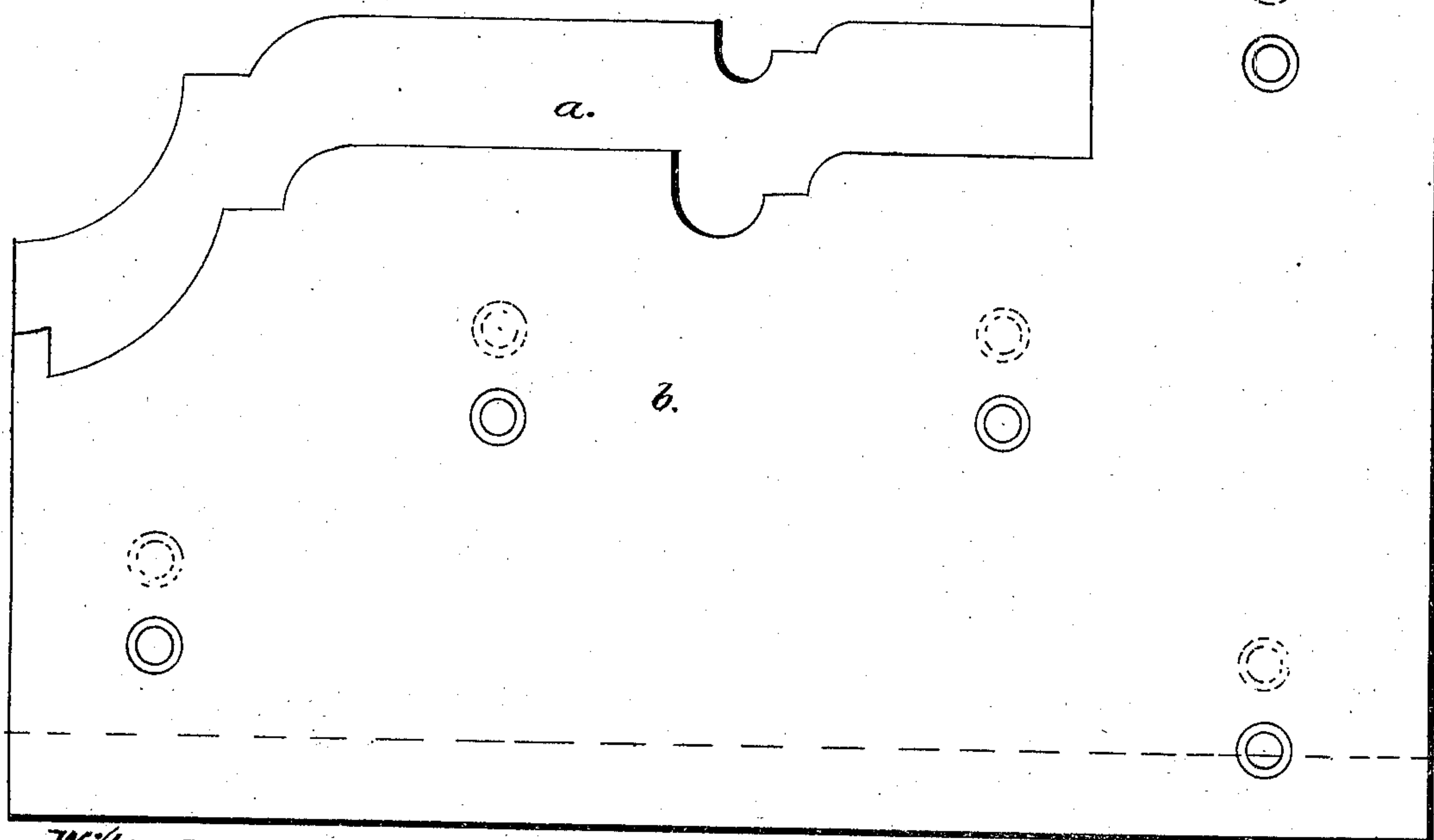
*Pattern for Castings.*

*N<sup>o</sup> 103,888.*

*Fig. 8. Patented Jun. 7, 1870.*



*Fig. 9.*



*Witnesses:*

*Chas. Smith,*

*Geo. D. Walker,*

*Inventor:*

*James L. Jackson  
per L. W. Sewell  
att.*



# United States Patent Office.

JAMES L. JACKSON, OF NEW YORK, N. Y.

Letters Patent No. 103,888, dated June 7, 1870.

## IMPROVEMENT IN PATTERNS FOR CASTINGS.

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, JAMES L. JACKSON, of the city and State of New York, have invented and made an Improvement in Patterns for Castings; and the following is declared to be a correct description of the same.

Patterns for architectural work, such as lintels, columns, door and window-casings, sills, &c, have heretofore usually been made out of wood. In some instances they have been carved out, and in this form there is great difficulty in obtaining uniformity of thickness. In other cases the separate pieces of wood have been united; but with curved and other moldings the labor is very great in making these patterns, and they are not of uniform thickness; besides this the wood warps, loses its shape, cracks, and the metal pattern cast from the mold of the wooden pattern is never as true and sharp as desirable.

The object of my invention is to lessen the cost of making patterns, and to insure their accuracy, sharpness, and uniformity of thickness, and at the same time expedite the construction and lessen the labor.

I make the first pattern of plaster, or sections of plaster put together, and from the pattern I make a mold and casting in iron, or any other metal, and dress the same up for use, where there are several castings to be made of the same kind. Thus my invention is to be understood as relating to the production of the plaster pattern.

I provide plates of metal, cut out into the sectional shape of the pattern to be produced, there being in all instances two plates to each member or portion of the pattern, and these are provided with corresponding screw-holes or other devices, so as to be attached to the same wooden sweep or block, and these plates are exactly the same, with the exception that the outlines of the operative edges of one and the outlines of the operative edges of the other, when the two plates are laid together, as seen in Figures 1 and 3, will be nearly parallel to each other, so that there will be between one and the other a space corresponding to the thickness of the pattern to be produced.

It is now to be understood that a door-post or jamb, or similar pattern, can be formed by making a plaster shape upon a board or block of wood, the workman using the metal plate *a* in a manner similar to the running of a cornice in a building. When this plaster shape or foundation is dry it is to be coated over with shellac varnish or other material, and then the surface is gone over a second time with the plate *b*, and a plaster pattern is thereby produced of the thickness corresponding to the differences in the outlines of the operative edges of the plates *a* and *b*, and in this way patterns of the greatest uniformity and accuracy can be produced.

After the plaster pattern is dry it will be found to have separated from the plaster shape or foundation, or it may be easily separated, and is to be coated with shellac or other material.

The plaster foundation may be greased, to facilitate the separation of the plaster pattern.

The plaster patterns, or sections of patterns, can be made in this manner with great rapidity and uniformity, and patterns for various portions of buildings or other castings can be thus produced. For instance, a straight door-jamb can be made only of plaster, as aforesaid, the ends being sawed off at the proper lengths, and flanges or other devices, for sustaining or attaching, being glued on as usual.

Patterns made as aforesaid can be mitered, to form frames for doors, windows, grates, fenders, &c., or for making lintels or sills.

I have shown in Figures 3 and 4 the shapes or sweeps *a* and *b*, for the base form *c* and pattern *d*, in Figure 6, and in Figures 1 and 2 the shapes or sweeps *a* and *b*, for the base form *c* and pattern *d* in Figure 7, and these may be united to form a window-cap or pediment, as seen in Figure 5.

For curved patterns my invention is especially available. For instance, an arched pediment may be made by the use of the shapes *a b*, as aforesaid; but, instead of moving them along between guide-strips, (as employed by plasterers,) the shape is attached to a sweep, and is swung upon a fixed center, to describe the desired arc of a circle, the two molds or shapes *a b* being employed successively, as aforesaid.

In some cases a pattern can be made to best advantage upon a wooden base of a cylindrical or segmental form, the shapes or molds *a b* being operated between guide-strips fastened upon such cylinder or segment in the proper position, and in this way patterns for the circular bases of columns, or for capitals, or for spiral moldings can be produced with accuracy and rapidity.

The wooden or other base may be mounted in a lathe or upon centers and rotated, the mold or shapes *a* and *b* being used stationary, and in this way columns and cylinders can be produced with rapidity and accuracy, as illustrated by the section, Figure 8, and shapes, Figure 9.

It is to be understood that various sections of a pattern, made separately, as aforesaid, may be sawed or cut so as to be united into one pattern for molding, previous to casting, and that portions of a pattern may be made in the aforesaid manner, and united to carved or other patterns or portions of patterns.

What I claim as my invention, is—

The method herein specified of making patterns for casting by the shapes, molds, or sweeps *a b*, that are employed respectively for producing a base or form of plastic material, and upon that making the pattern of plastic material, substantially as set forth.

Dated this 14th day of May, A. D. 1870.

JAMES L. JACKSON.

Witnesses:

CHAS. H. SMITH,  
GEO. T. PINCKNEY.