

Sheet 1, 3 Sheets.

Wood & Sheridan.

Sheet Metal Bending Mach.

N<sup>o</sup> 101,556. Patented Apr. 5, 1870.

Fig. 1.

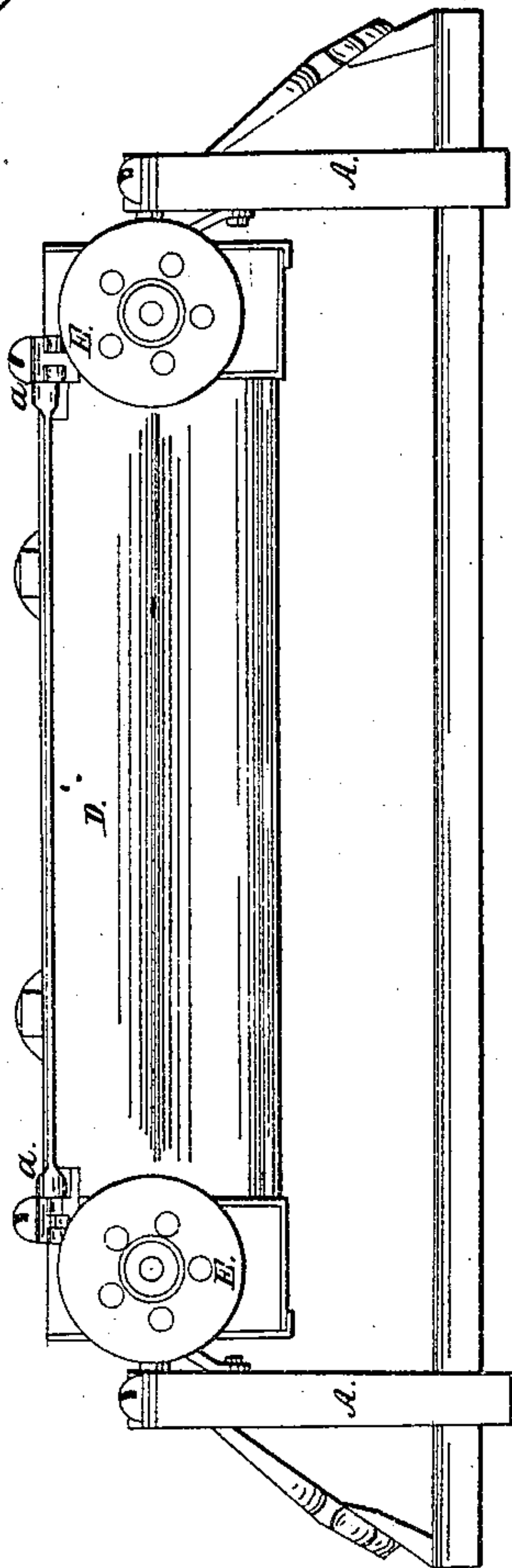
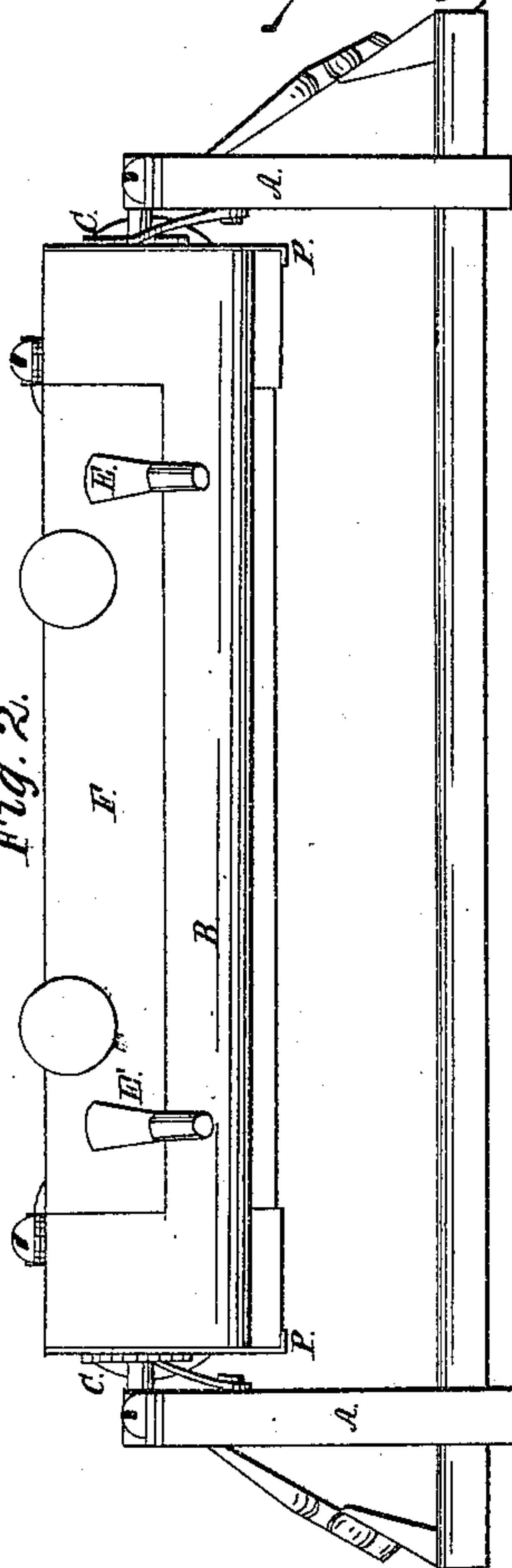


Fig. 2.



Witnesses.

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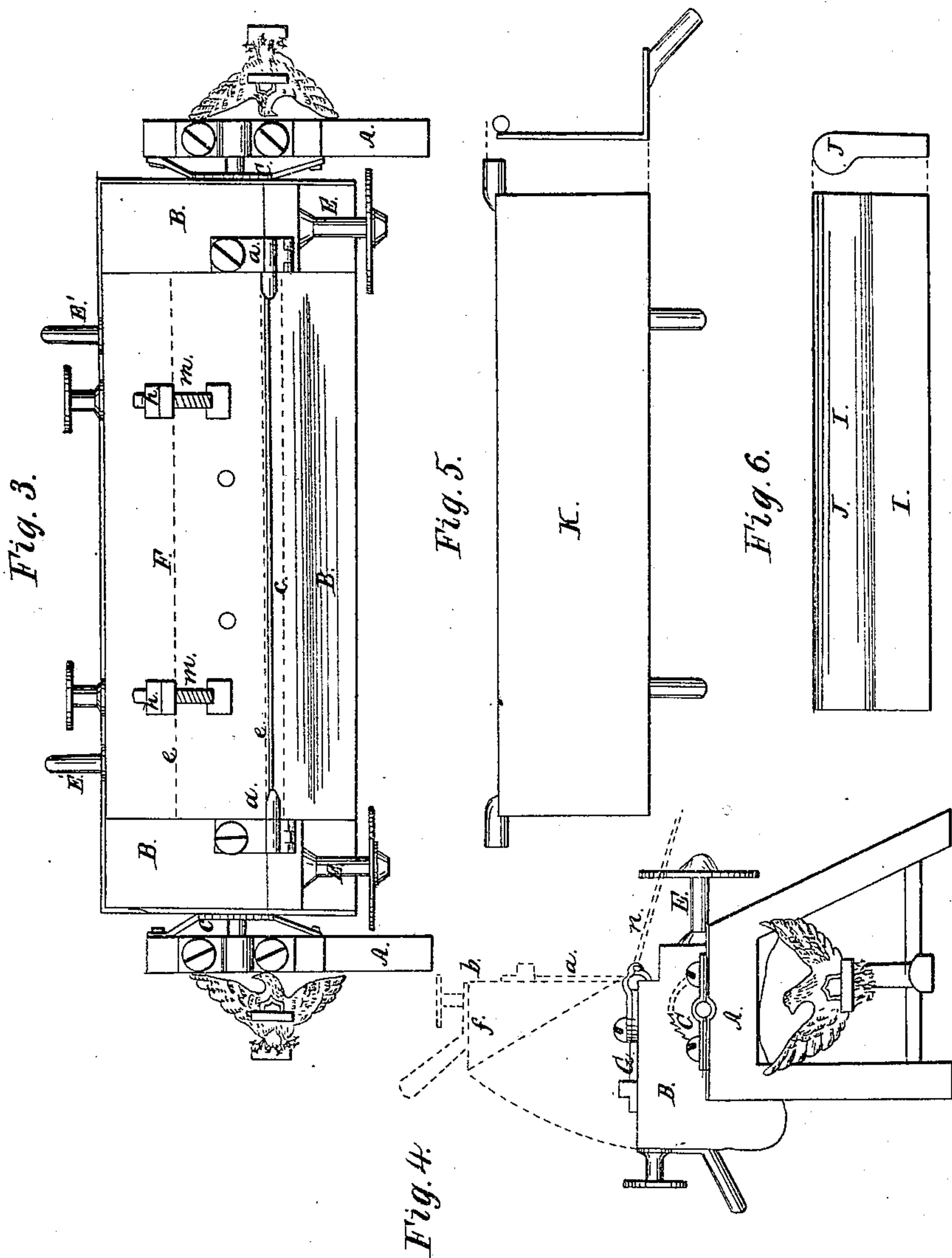
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Sheet 2, 3, Sheets.

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Fig. 12.

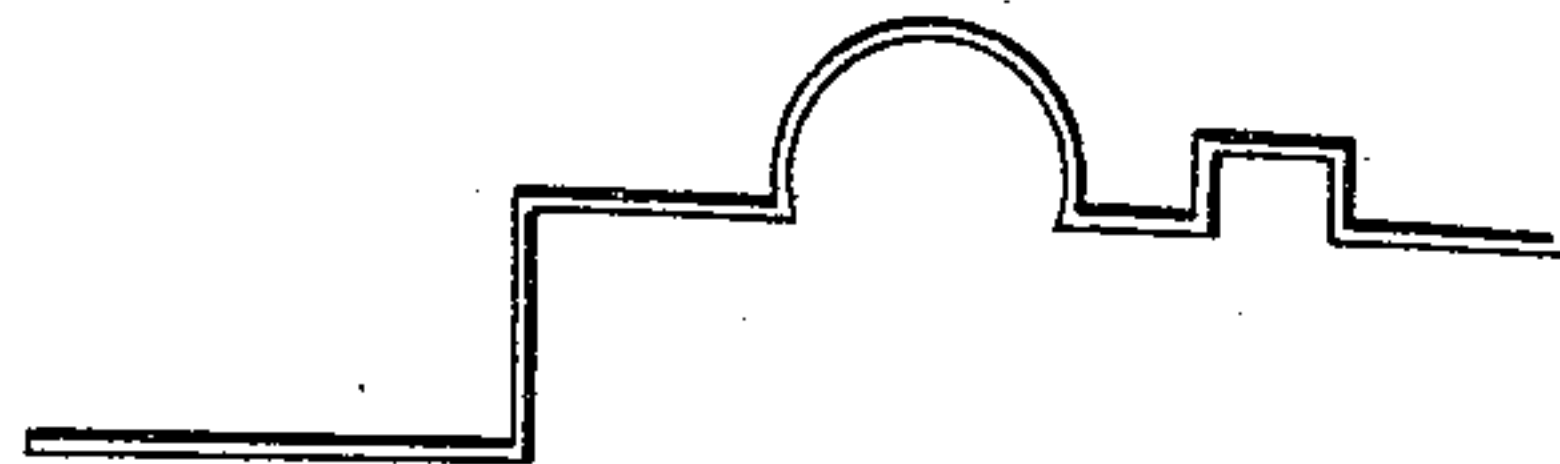


Fig. 11.



Fig. 13.

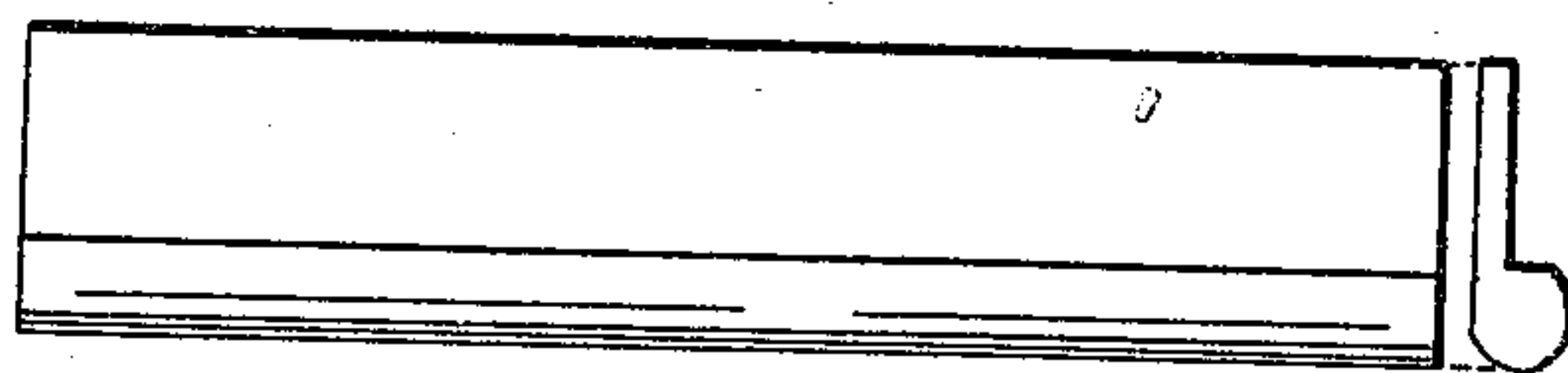


Fig. 7.

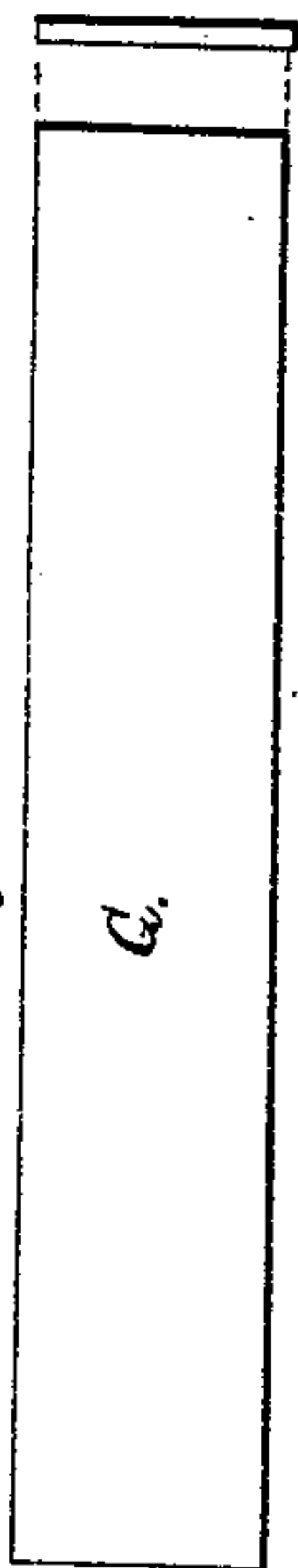


Fig. 9.

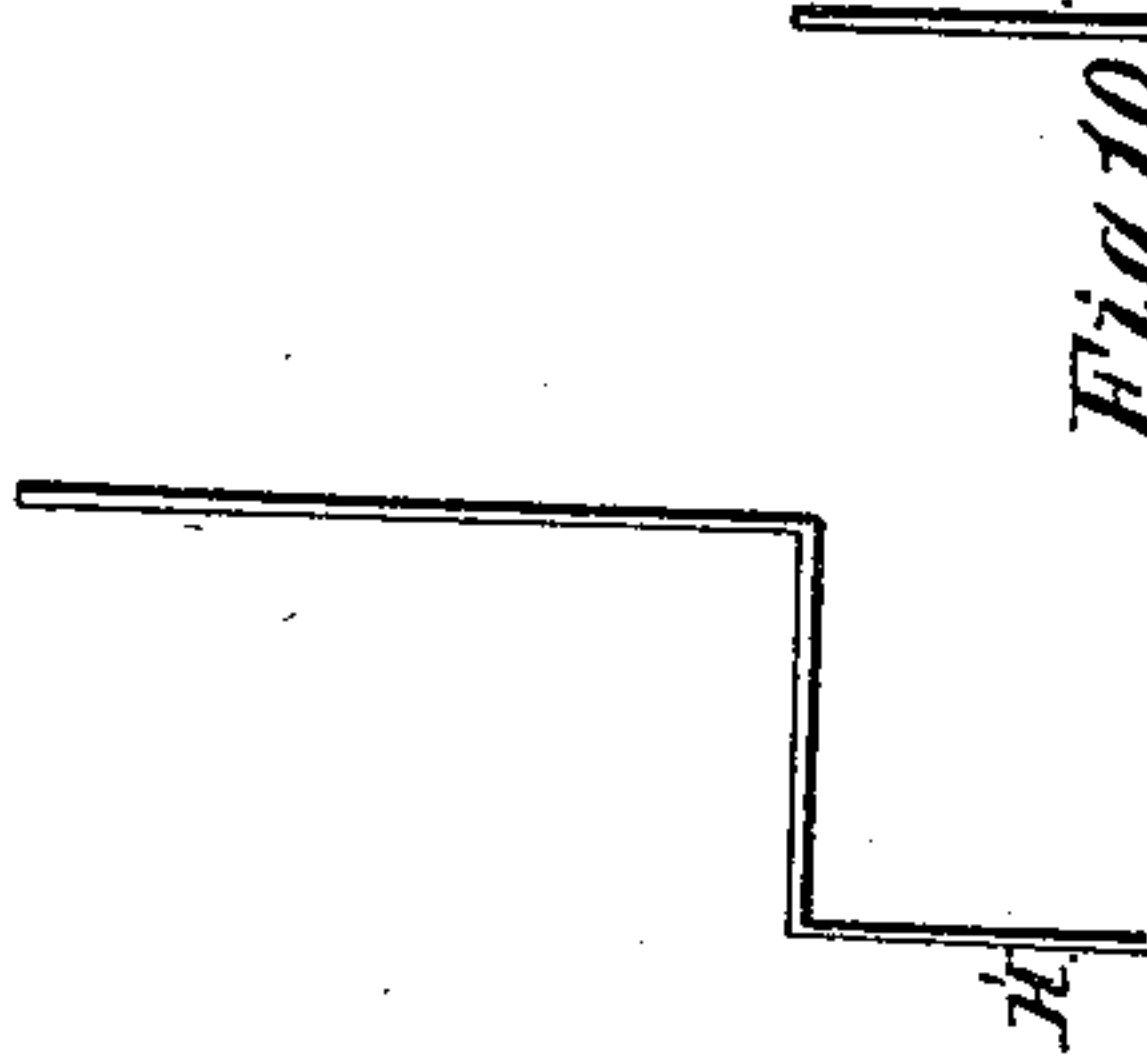


Fig. 10.

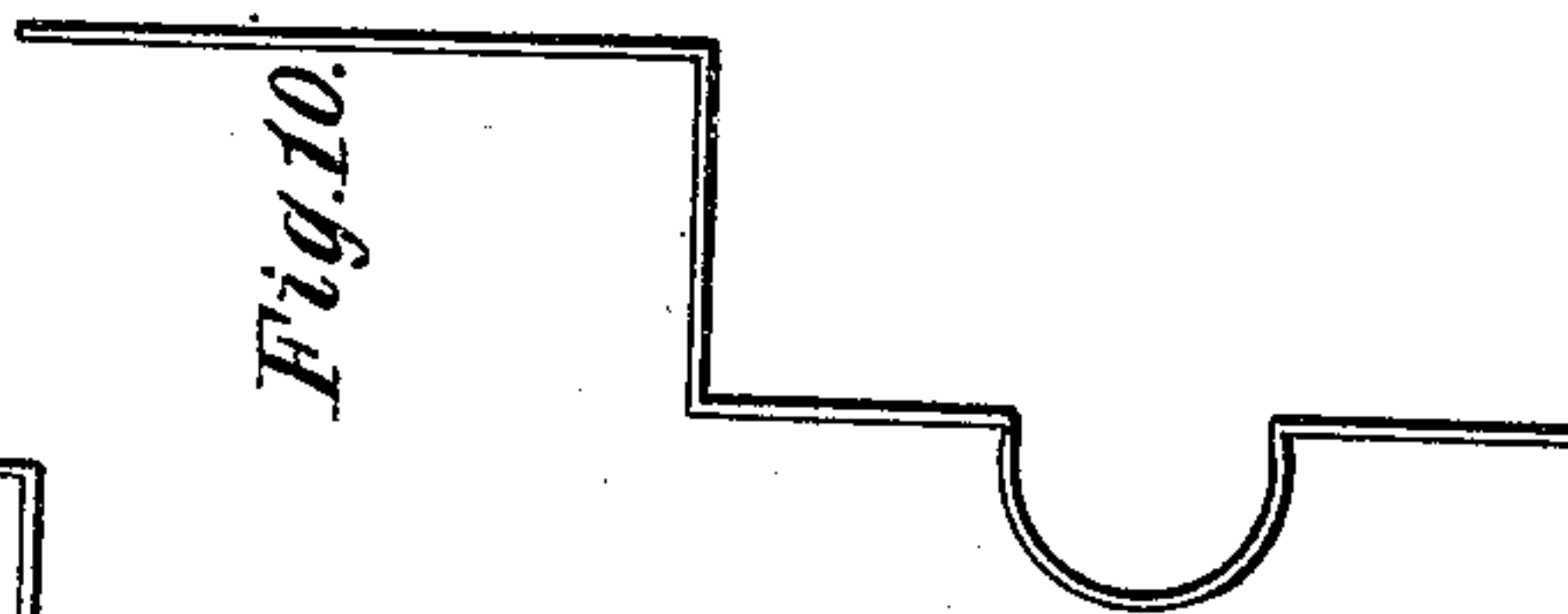
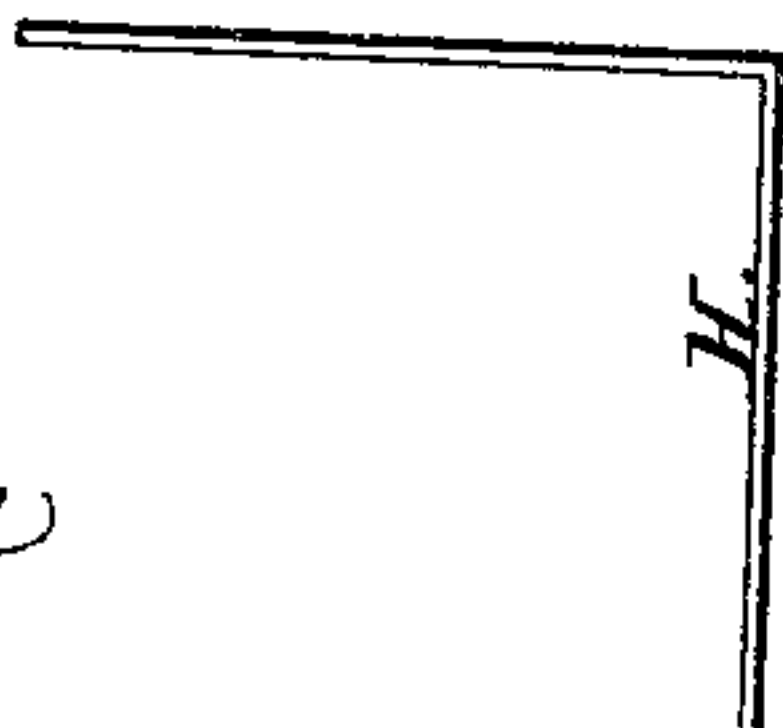


Fig. 8.



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# United States Patent Office.

CHARLES L. WOOD AND CORNELIUS A. SHERIDAN, OF CLEVELAND, OHIO.

Letters Patent No. 101,556, dated April 5, 1870.

## IMPROVEMENT IN MACHINE FOR MAKING CORNICE MOLDINGS.

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

To all whom it may concern:

Be it known that we, CHARLES L. WOOD and CORNELIUS A. SHERIDAN, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain Improvements in "Machine for Making Cornice Moldings," of which the following is a specification.

### Drawings.

Figure 1 is a side view of the machine.

Figure 2, a view of the opposite side of fig. 1.

Figure 3 is a view of the top.

Figure 4 is an end view.

Figures 5 and 6 are detached sections.

Figures 7, 8, 9, 10, 11, 12, and 13 will be referred to.

### Object of the Invention.

The object of this invention is to form the members of metal moldings, viz: the fillets, heads, &c., so that said members shall be true and uniform in their contour, and which may also be of variable size and configuration, as the style of moldings required may be, as hereinafter described.

### Specification.

In the drawing—

A represents a pair of standard frames, a side view of which is shown in fig. 4.

In the top of said frames is journaled the bed-piece B of the machine, so that it may vibrate between the cheeks of the standard, and which is held in any desired position by a ratchet-wheel and pawl, C, fig. 4.

D, fig. 1, is an adjustable brake, so fitted to the bed that it is allowed to slide backward and forward in relation thereto, by means of the adjusting screws E, for a purpose hereinafter shown.

F, fig. 3, is a leaf, hinged to the top of the bed at the points *a*, whereby it can be elevated to the portion indicated by the dotted lines *b*, fig. 4, by the handle E'.

It will be observed that the axial line or edge of the leaf is parallel with the edge of the brake, and that the two hold a close and direct relation to each other, so that on lifting the leaf the axial line or edge thereof will coincide with the edge of the brake, neither rising above it, below it, nor away from it while being elevated. It will also be seen that the edge of the bed and the edge of the leaf, and that of the brake, are all in close relation, and parallel to each other, forming three approximated edges.

Having thus described the construction of the machine, the practical operation of the same is as follows, viz:

The operator takes his position on the side shown in fig. 2, the edge of a sheet of metal, of which the cornice or molding is to be made is inserted between the edge *c* of the brake and that of the leaf, the brake

being screwed outward to allow of its admission, which is again screwed up, thereby clamping the sheet between the edge of the brake and the side of the bed immediately under the axial line or edge of the leaf, and perpendicular therewith, and against which the inner side of the brake presses for holding the sheet. A plate thus placed in position is shown by the dotted lines A, fig. 4.

A sheet on being thus secured in the machine, a brake, plate, or bar, G, fig. 7, is then laid lengthwise upon the leaf, as shown in fig. 4, also indicated by the dotted lines *e*, fig. 3, and held from slipping back by the adjustable lugs *h*, operated by the screws *m*.

It will be obvious that the face of said plate is its thickness above the edge of the leaf and that of the brake; hence, on turning upward the leaf, as indicated by dotted lines *f*, fig. 4, the edge of the plate will fall over onto the outer side of the edge of the brake, while the axial line or edge of the leaf remains on the inner side. This upward movement of the leaf causes the plate to brake the sheet over the edge of the brake, as indicated by the dotted lines *n*, thereby forming an angle across the sheet, as shown in fig. 8.

The sheet is now removed, and the limb H of the angle secured in the machine, so that the apex of the angle shall coincide with the angle of the edge of the brake plate, thereby bringing the sheet back toward the operator over the plate.

The leaf is again raised, and the edge of the plate brakes the sheet as before, over the edge of the brake, forming an additional angle, H', as shown in fig. 9.

The sheet is again removed, and if another angle for a fillet is required, the previous operation is repeated to the extent of any number of angles or fillets that the style of molding may require.

It will be obvious that the distance that an angle made is from another will depend upon the depth that the sheet is inserted in the clamp, so that said distance can be regulated at the will of the operator.

After a sufficient number of angles or fillets have been made, the bead is formed as follows:

The sheet is partially withdrawn, so far as will be required for the curve of the bead. It is then clamped as before, and a former, I, fig. 6, takes the place of the brake-plate. The sheet is now taken by the operator and turned backward or toward him, which, as a consequence folds the sheet over the rounded post J of the former, thereby forming a bead in the sheet parallel to and in combination with the fillets already made. A sheet thus completed, a molding is shown in fig. 10.

It will be obvious that by this device the size of the angle or fillets, their number, and also that of the bead can be varied to any extent by the adjustment of the sheet in the machine and repeating the brakes,



also, the size and shape of the bead can be as easily varied by the use of different size formers, or rather formers having different size molds or beads thereon.

The several illustrations shown in the drawing are simply a few of the styles of molding that may be formed by this machine, but which, however, can be varied to any possible extent.

Instead of the movable brake-plate G, used in connection with the leaf F, for breaking the sheet over the edge of the brake, a leaf, K, fig. 5, can be substituted therefor. Said leaf has its breaking-edge above the axial line made thicker than the rest of the leaf, corresponding in this respect to the thickness of the plate G, and which operates upon the sheet in the same way as said brake-plate does.

In the event that the leaf K is substituted for the brake-plate, in order to form the bead, a former, fig. 13, is used for making the bead.

It will be observed that the under side of said former is rabbeted out, forming a shoulder so that the rounded post or bead thereof will drop down over the edge of the leaf to the axial line, or near to the sheet, so that there shall be no space left between the surface of the sheet and the face of the bead of the former at the instant that the sheet is folded upon it, or commencing to curve.

The weight of the brake is supported upon the lugs P, fig. 2, projecting from the sides of the bed under the ends of said brake, and upon which it slides, when

actuated by the adjusting screws referred to, hence, none of the weight of the brake is supported by the screws, they being used only to move the brake for clamping the sheet.

#### *Claims.*

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The adjustable vibrating bed B, when constructed substantially as described and for the purpose specified.

2. The adjustable brake D, as arranged in combination with the leaf F and bed B, substantially as and for the purpose set forth.

3. The brake-plates G, in combination with the leaf F, constructed and arranged as described, in relation to the edge of the brake D, substantially as and for the purpose set forth.

4. The leaf F, when constructed and arranged in its relation to the edge of the brake D and the edge of the bed B, so that its axial line or edge shall come in close relation therewith, forming with these three close parallel edges, substantially as and for the purpose set forth.

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Witnesses:

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