

C. Chambers, Jr.

Brick Mach

Nº 97,356.

Patented Nov 30, 1869.

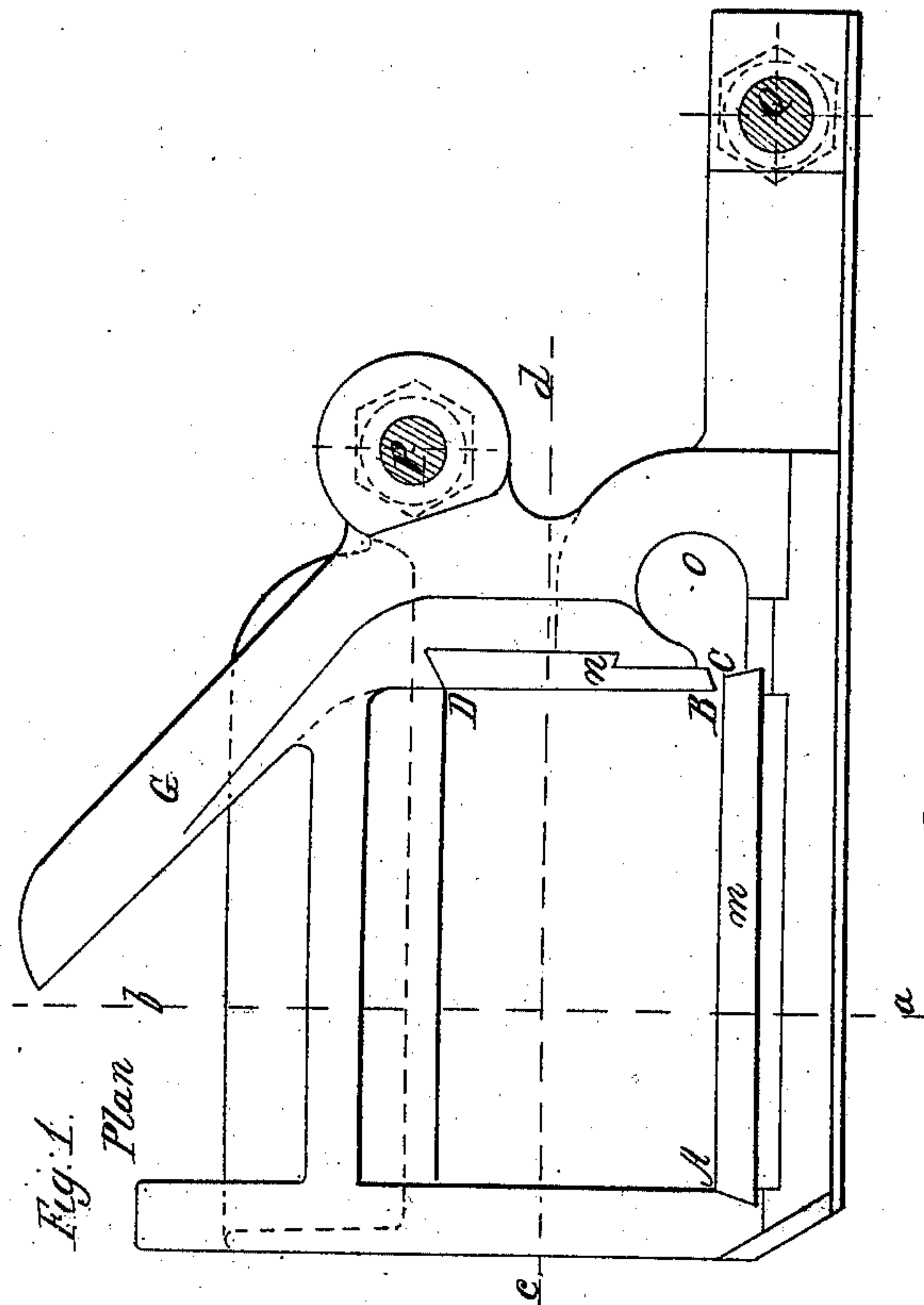
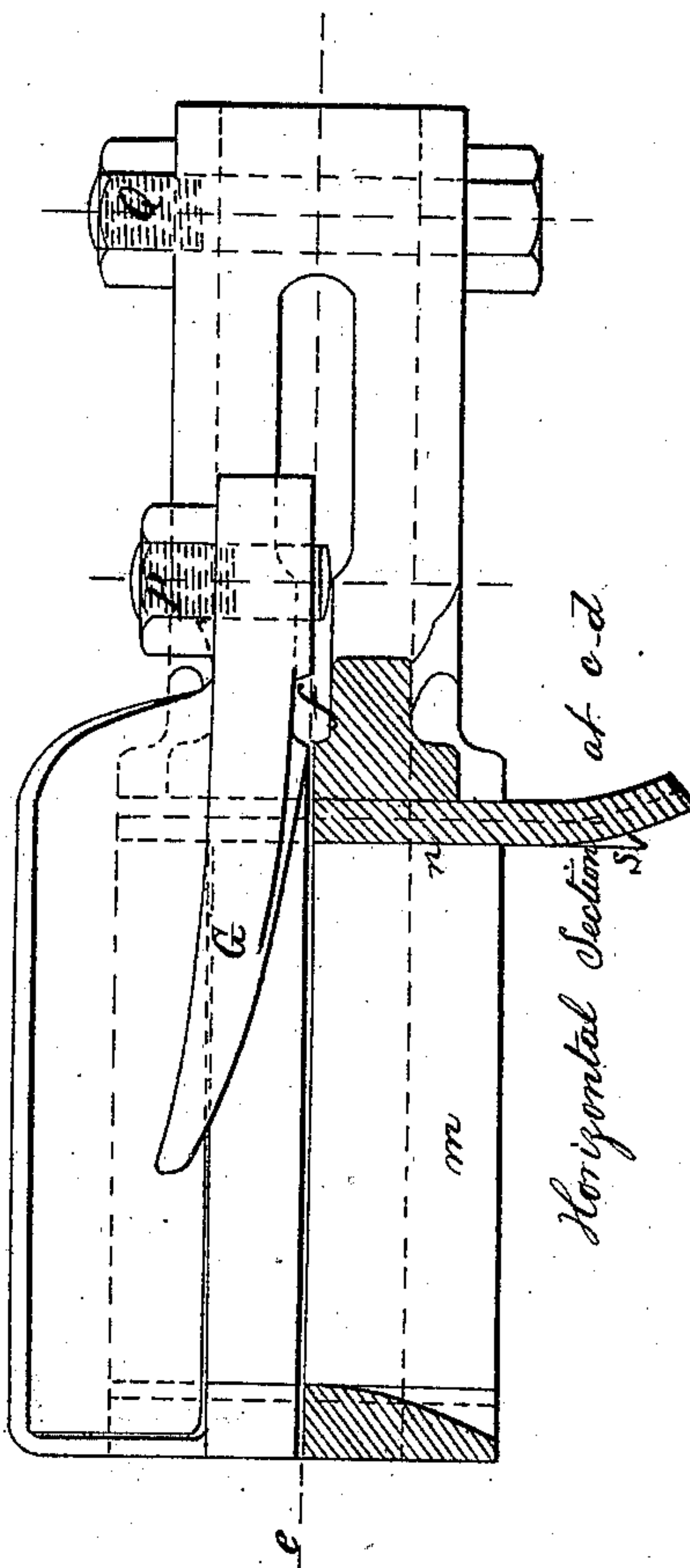
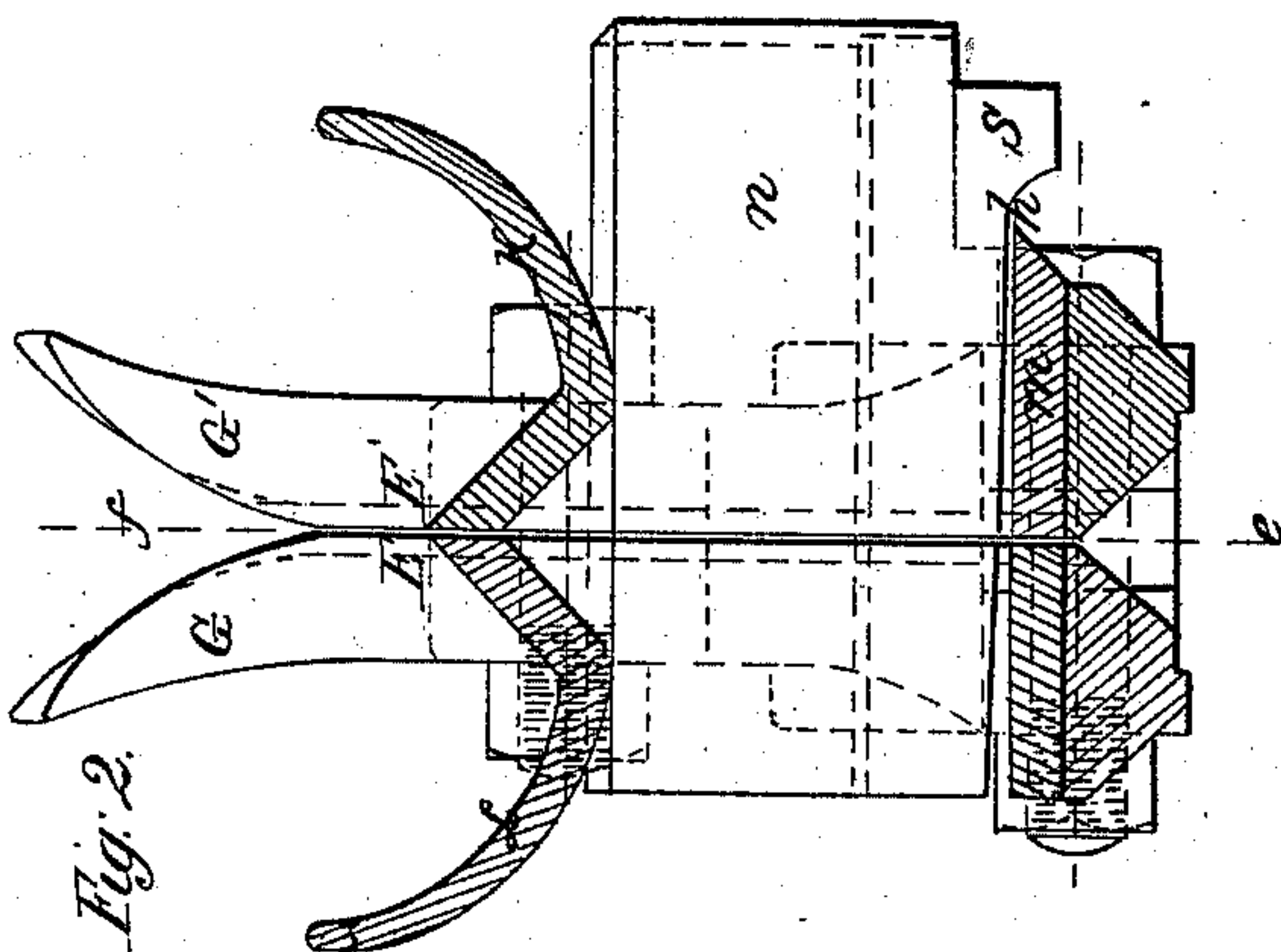


Fig. 3.



Horizontal section at a-a



Section at b-b

Witnesses;
Howard Ahr Damberg.
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CYRUS CHAMBERS, JR., OF PHILADELPHIA, PENNSYLVANIA

Letters Patent No. 97,356, dated November 30, 1869; antedated November 20, 1869.

IMPROVED CUT-OFF FOR BRICK-MACHINES.

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, CYRUS CHAMBERS, Jr., of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in that class of brick-making machines in which the clay is pressed out in a continuous bar, and cut off by a revolving knife, said improvements relating to that portion of the machinery in which the severance of the brick from the bar is effected; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents an inside elevation of my improvements;

Figure 2 represents a vertical section; and

Figure 3, a horizontal section of the same.

The same letter designates the same part wherever it occurs.

The nature of my invention consists—

First, in so constructing the movable frame or stirrup-guide, through which the bar of clay passes, and which also serves as a guide for the severing-knife, that any portions of clay that may cling to the knife, after severing a brick, are jarred off when the knife again descends, and caught in a box provided for that purpose;

Second, in removing the bearing of the corner opposite to the point where the severing-knife first comes in contact with the clay-bar, and providing a large opening behind it to facilitate cleansing without interfering with the clay-bar, thus remedying the difficulty formerly experienced in the clogging of this corner, and the consequent tearing of the bar;

Third, in making the upper edge of the bottom-plate, over which the clay-bar passes, and in the direction of its approach, a sharp edge, in combination with a curved side-guide, whose lower edge is provided with a knife, which projects beyond and below the line of the sharpened edge of the bottom plate, with a clearance between to prevent clogging, so that all the inequalities of the bar below the plane of its bottom are cut off, the angle of the slit is completed, and the angle of the bar shaved smoothly.

To enable others to make and use my invention, I will describe its construction and operation.

The movable frame or stirrup-guide is constructed in two portions, and bolted together, as shown in figs.

1 and 3, with a space left between them, indicated by the red lines *c f* in figs. 2 and 3, for the passage of the severing-knife.

The guides *G G'* for the severing-knife, are so arranged sloping from each other (see figs. 2 and 3) and toward the descending knife, as *G*, fig. 1, in combination with the edge *E E'*, and the box *K L*, fig. 2, that any clinging particles of clay are knocked from the knife in its descent, caught in the box *K L*, and prevented from falling on the moving clay beneath.

The close bearing of the corner *B*, against which the bar is forced when being severed, is removed by elevating the plate *N* above the plate *M*, as shown in fig. 1, and constructing a large opening, *O*, for clearing out in the rear of the corner, so that the corner cannot become clogged up, nor the bar torn.

The upper edge *A C* of the bottom plate *M* is made sharp, as shown at the point *h*, fig. 2, so that any inequalities of the clay-bar below the plane of the base are shaved off.

The guide-plate *N* is constructed with the projecting part curved, in order that the clay-bar may be guided by it to its proper place, and with a knife, *s*, on its lower edge projecting beyond and below the edge *h* of the plate *M*, fig. 2, leaving a clear space between to prevent clogging, to cut off any portion of the bar that may project beyond the angle of the slit.

Having thus fully described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. The box for catching the particles of dirt from the severing-knife, when used in combination with the cut-off, constructed as described.

2. The open corner *B*, in combination with the opening *O*, constructed as and for the purpose set forth.

3. The combination of the knife-edge of the bottom plate with the straight knife *s* upon the lower part of the curved side-guide *N*, when constructed as and for the purpose set forth.

The above specification of my said invention, signed and witnessed at Philadelphia, this 9th day of March, A. D. 1869.

CYRUS CHAMBERS, JR.

Witnesses:

JAMES P. MCCLURE,
W. P. DAVIS.