

W. E. Hatfield.

Fetting Machine.

N<sup>o</sup> 2863  
33867

Patented Dec. 3, 1861.

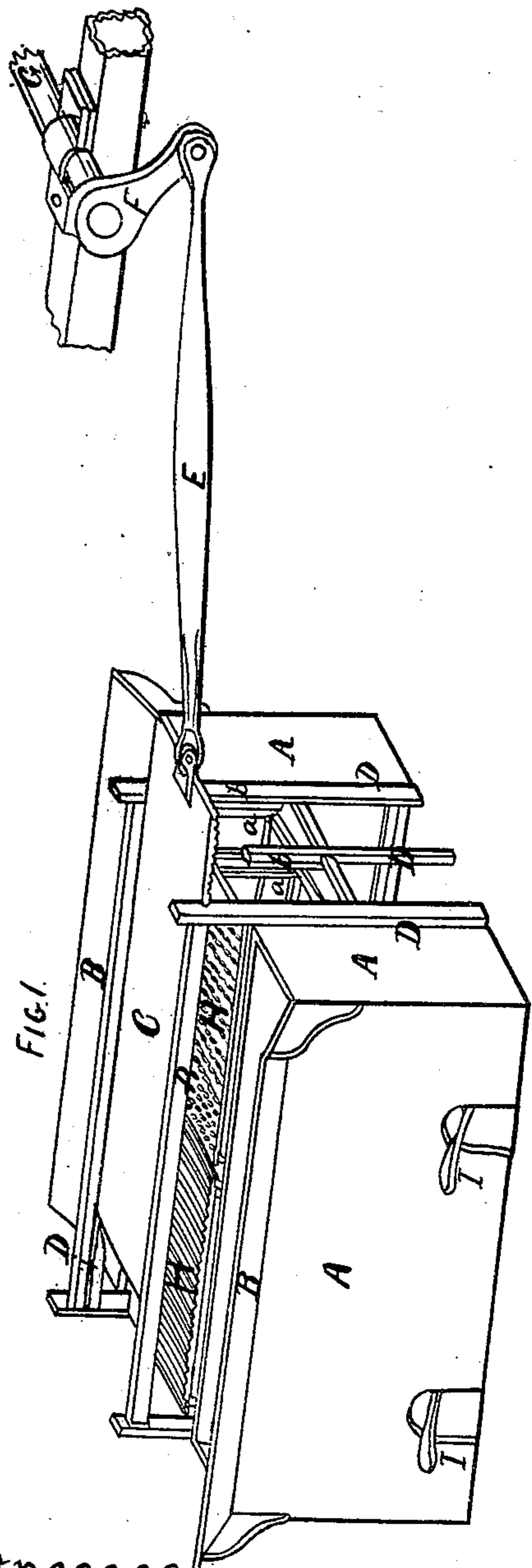


FIG. 1.

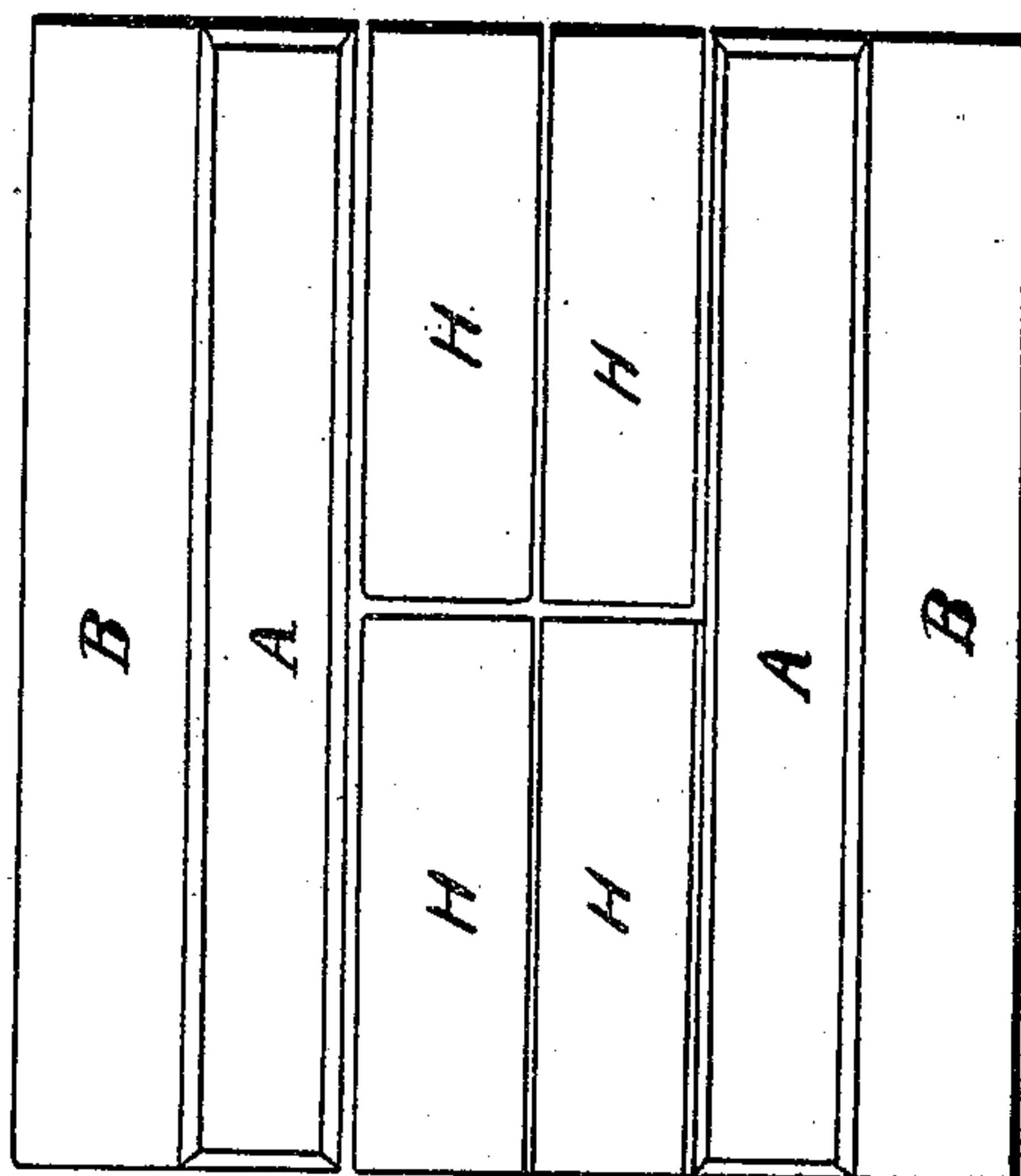


FIG. 3.

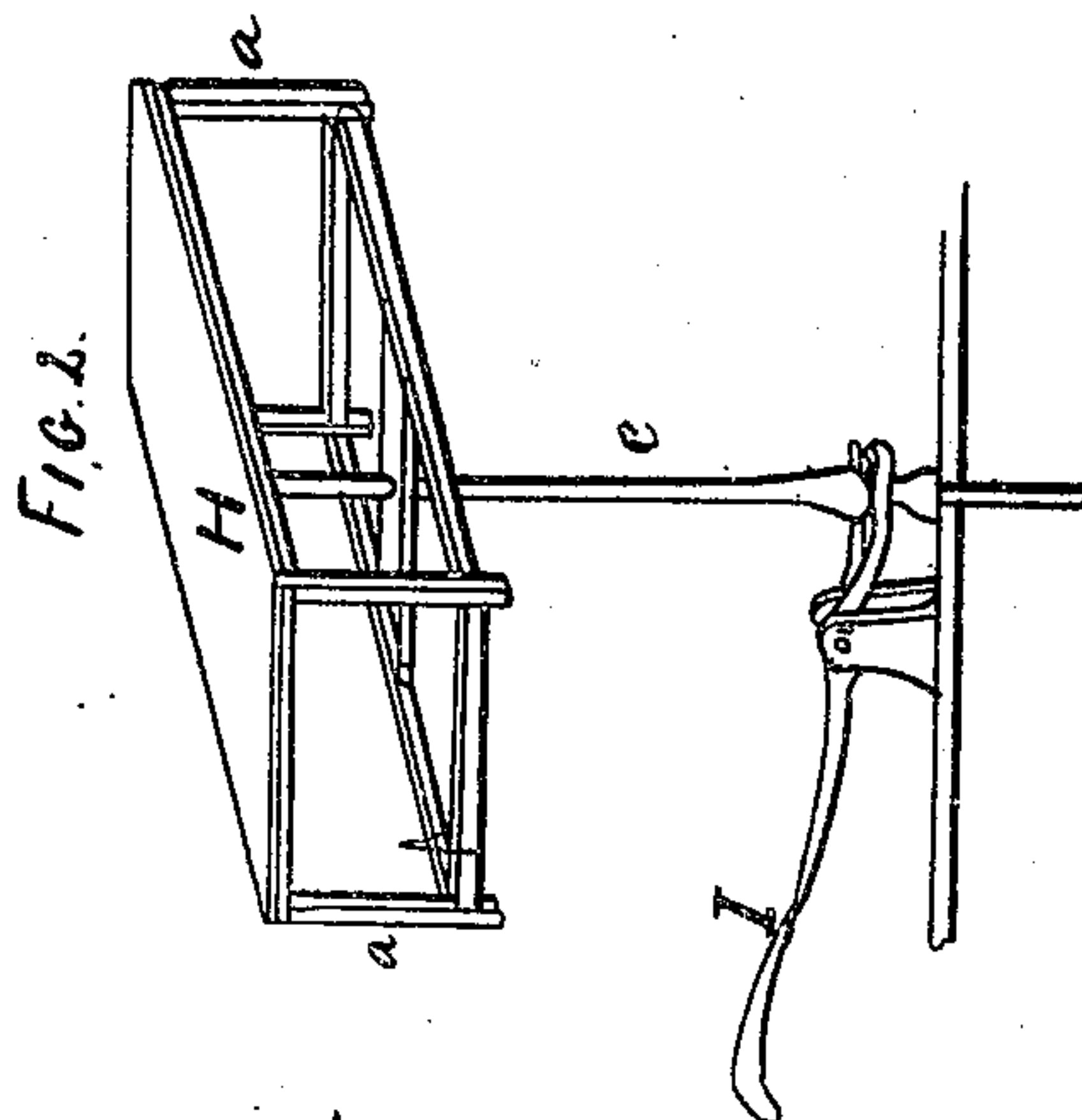


FIG. 2.

Witnesses.

Wm M. Goring  
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Inventor

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# UNITED STATES PATENT OFFICE.

W. E. HATFIELD, OF NEWARK, NEW JERSEY, ASSIGNOR TO REUBEN RADEN  
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## IMPROVEMENT IN MACHINES FOR SIZING HAT-BODIES.

Specification forming part of Letters Patent No. 33,867, dated December 3, 1861.

*To all whom it may concern:*

Be it known that I, WILLIAM E. HATFIELD, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain Improvements in Machinery for Sizing Hat-Bodies; and I do hereby declare the following to be a full and exact description thereof, reference being had herein to the drawings which accompany this specification and make part of the same.

The nature of my invention consists in a new general arrangement of the means for the accomplishment of the desired end.

In the drawings, Figure 1 is a perspective view of the machine. Fig. 2 is a view of one of the movable under plates with the lever-age for lifting the same. Fig. 3 is a top view of the machine with the movable upper plate removed from over it.

The same letters refer to the same parts in each figure.

A designates cisterns in which the liquor used is heated by steam-pipes. These cisterns are placed between a crozing board or plank, (in front of which the workman stands, shown by B,) and the sliding and lifting plates which do the work.

C designates an upper iron plate with corrugations on the under side thereof.

D shows the frame-work in which the plate C is made to slide. A reciprocating motion is given to this through the connecting-rod E and the crank F by a pulley or gearing on the driving-shaft G. The under plates H, fast to frames *a*, are lifted by the foot of the work-

man operating the levers I. The frames slide in guides affixed to the main frame D, as shown at *b*. They also have a center post *c*, which being fast to the plate at its top and working in a guide in the frame-work or in the floor on which the machine stands, at the bottom end, steadies and guides the plates so that their upper surfaces shall be parallel to the under side of the sliding plate C.

The workman having crozed the bodies rolls them in a cloth, dips them in the hot liquor in the cisterns A, and places the roll on the surface of the plate H, then with his foot elevates the plate to the moving plate C, continuing it there as long as in his judgment the rolling is required, having the advantage of giving the exact amount of pressure needed and varying it as the operation proceeds.

I do not claim having movable plates to effect the rolling motion, as that is not new.

I do not broadly claim any particular surface to the plates used, as the object can be attained either by corrugations, saw-teeth, indentations, pins, or pintles, or a plain surface; but

What I do claim and desire to secure is—

The combination of the plates C and H, having either smooth or roughened surfaces, with the cisterns and crozing-planks, the whole being constructed and operated substantially as and for the purpose hereinabove specified.

W. E. HATFIELD.

Witnesses:

WM. M. GOODING,  
C. M. POERSON.