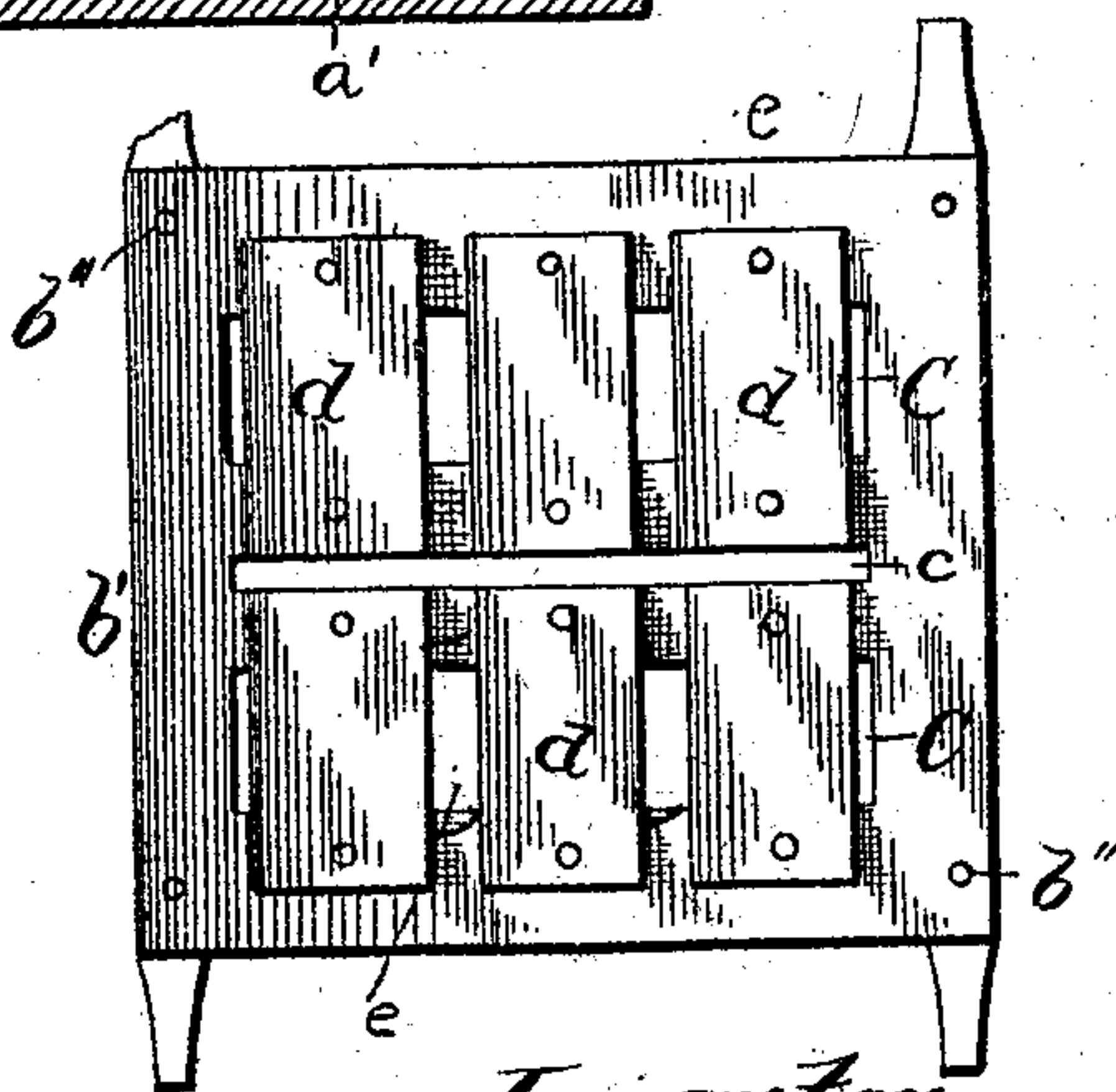
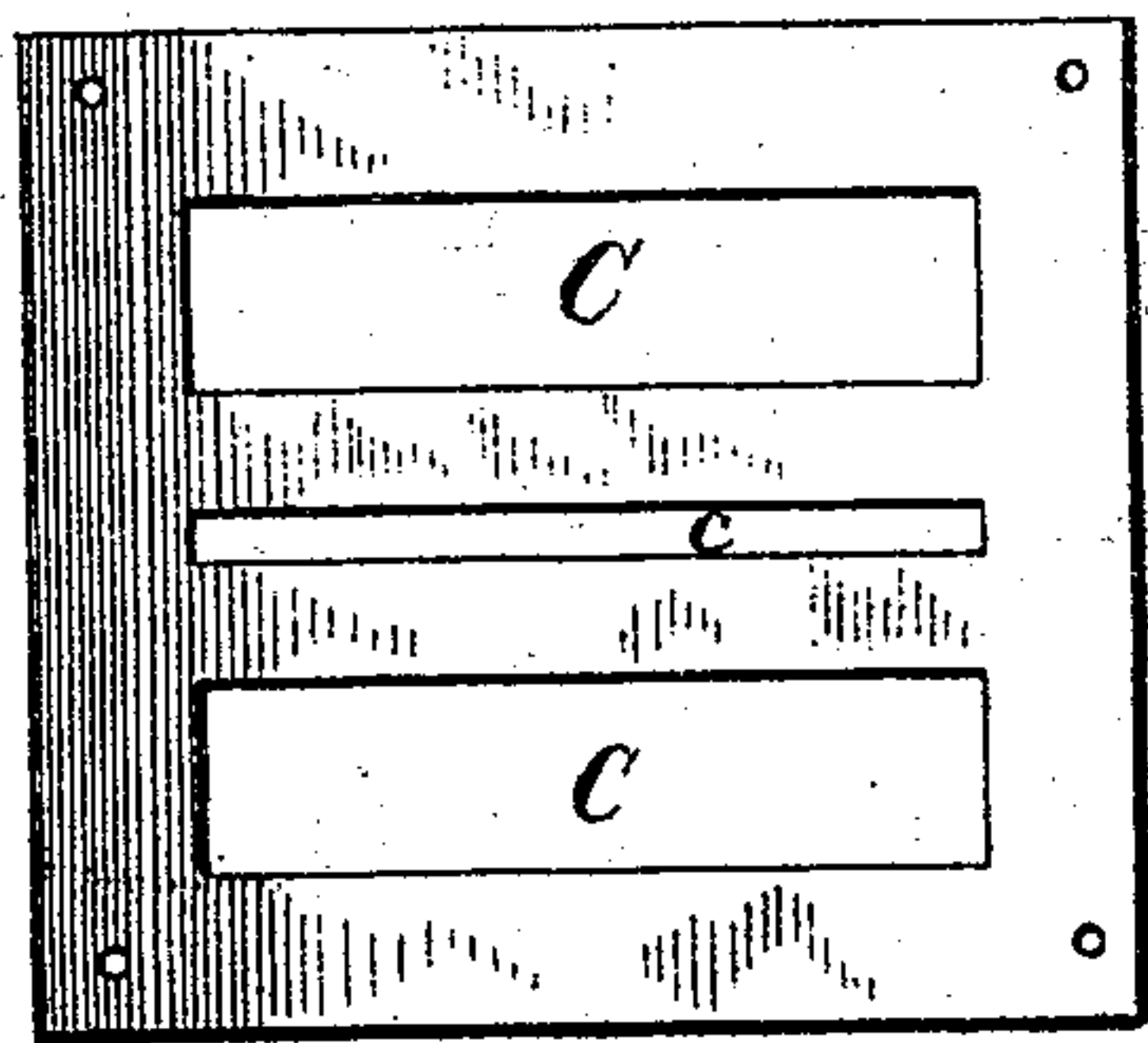
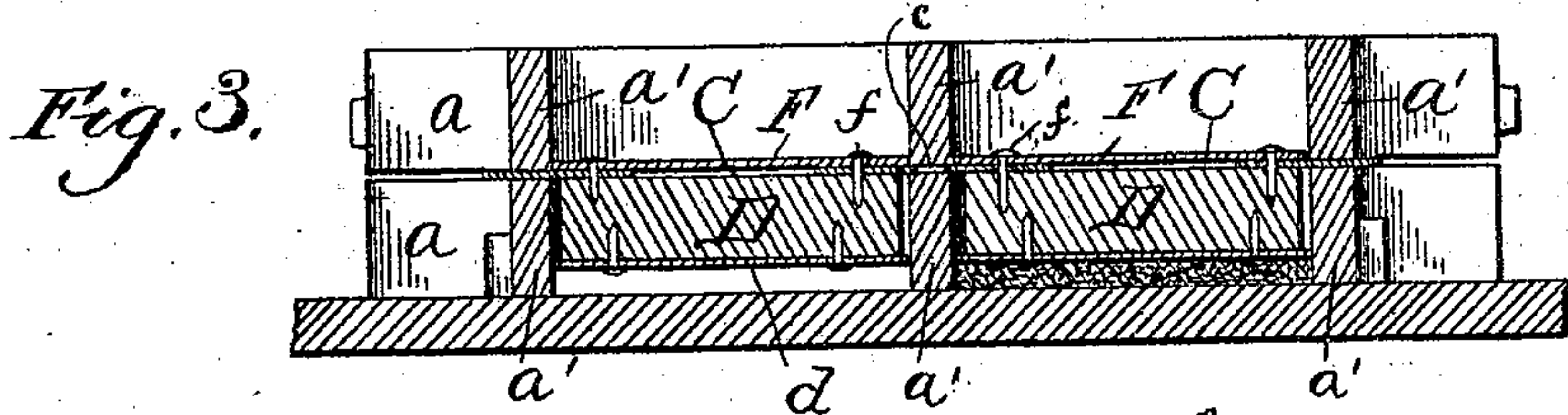
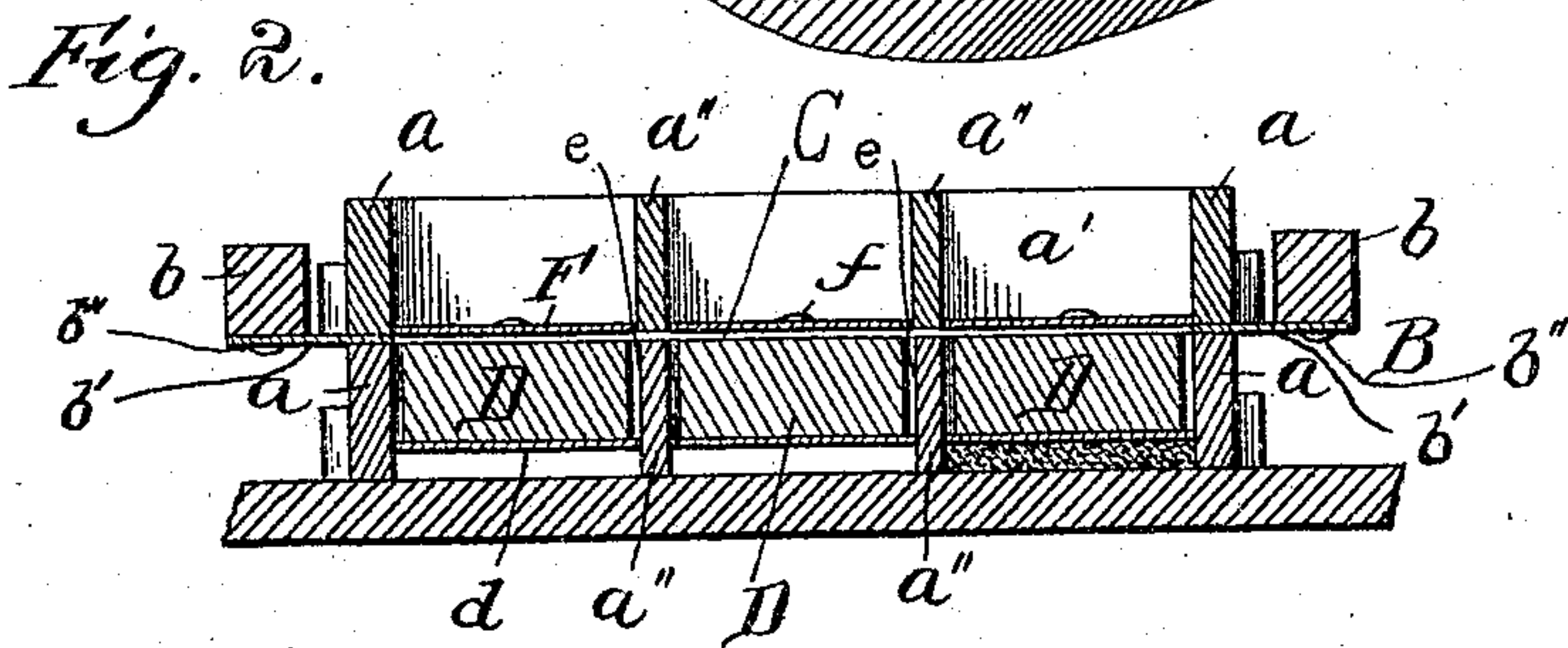
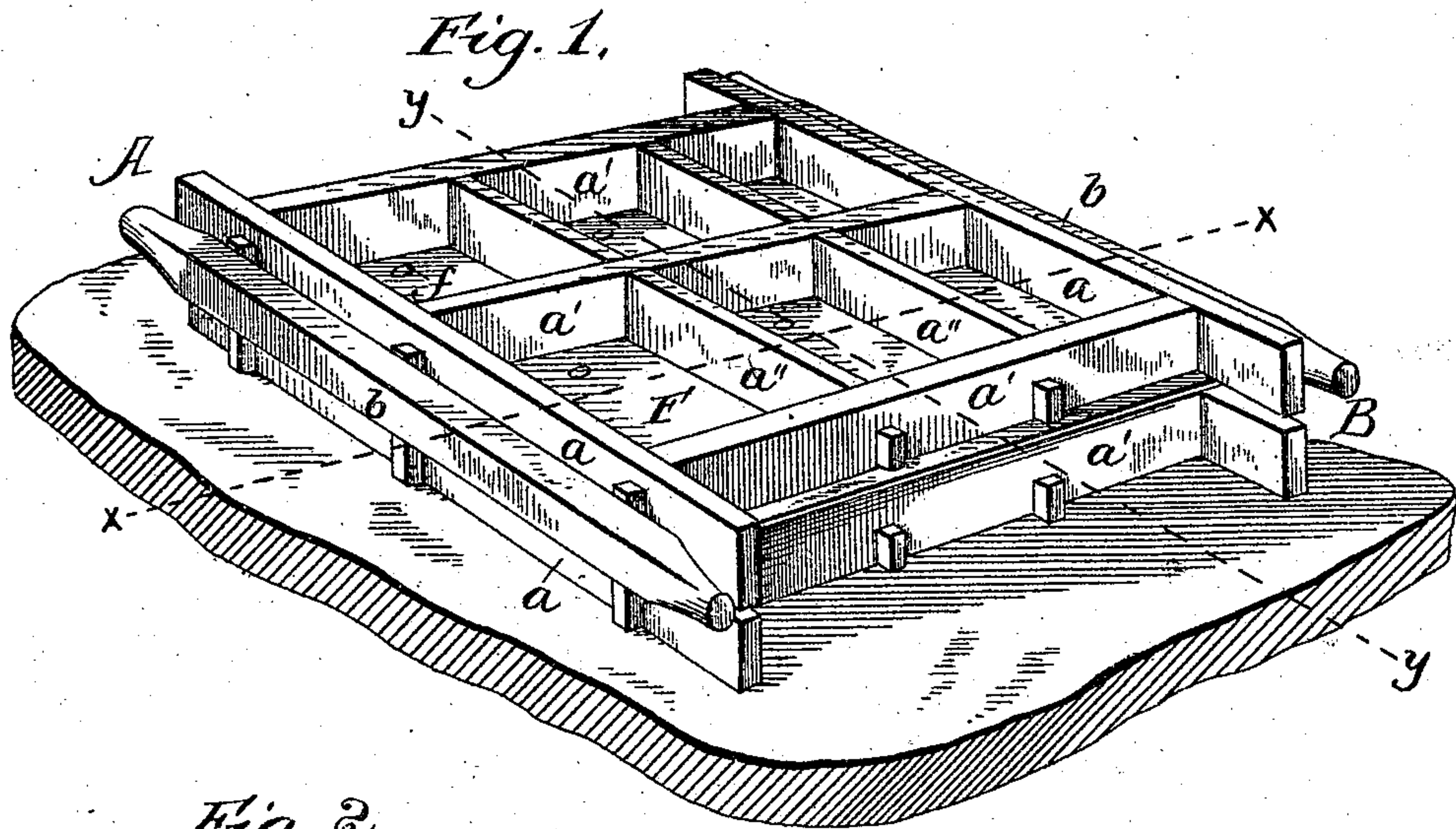


(Model.)

R. M. VAUGHAN.
SHAPER FOR PLUG TOBACCO.

No. 501,749.

Patented July 18, 1893.



Witnesses:

J. B. McGirr.
Arthur L. Bryant.

Inventor.
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By Edson Bros.
Atty.

UNITED STATES PATENT OFFICE.

ROBERT M. VAUGHAN, OF RICHMOND, VIRGINIA, ASSIGNOR OF ONE-HALF
TO WILLIAM P. MAYO, OF SAME PLACE.

SHAPER FOR PLUG-TOBACCO.

SPECIFICATION forming part of Letters Patent No. 501,749, dated July 18, 1893.

Application filed May 14, 1892. Serial No. 433,024. (Model.)

To all whom it may concern:

Be it known that I, ROBERT M. VAUGHAN, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Shapers for Plug-Tobacco; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in devices for making plug tobacco and its object is to provide a novel double open plate-back for plug tobacco shapers, which can be more cheaply constructed and will better retain its shape than the ordinary devices, which is necessary to obtain good work.

The tobacco shapers heretofore in general use may be classed as those having a perfectly solid back and those having transverse strips to form the back. It has been found that these constructions are open to serious objections. In the solid back, the tobacco is forced up into the space between the sections of the pressure bed and there accumulates, to become sour and interfere greatly with the operation of the device, sometimes forcing and springing the sections out of place and even breaking them. It is also nearly impossible to properly clean the device as the tobacco becomes caked and hardened between the sections and cannot be washed out. The other construction, comprising a back plate made of individual strips secured to side bars, is much more expensive than the one I contemplate, and it permits the side bars and blocks or sections to get out of position, so that spaces of more or less size will be formed around said blocks or sections in which the tobacco is forced to form a plug with uneven and irregular edges unfit for commercial use, except of the lowest grade.

It is my object to provide a device which will obviate all these disadvantages and possess many advantages, and with these ends in view, my invention consists of an ordinary frame comprising the side bars and cross pieces to form a series of compartments, and a pressure bed having the single back plate secured to side bars and provided with three

or more transverse slots, and a series of blocks or sections secured on the back plate on one side thereof, over the larger slots, and having plates secured on each side thereof, one of which is arranged on top of the back plate.

My invention consists further of certain details of construction and arrangement of parts which will appear hereinafter.

In the accompanying drawings, Figure 1 is a perspective view. Fig. 2 is a vertical sectional view on the line $x-x$ of Fig. 1. Fig. 3 is a similar view on line $y-y$ of Fig. 1. Fig. 4 is a detail view of the back plate. Fig. 5 is a bottom plan view of the section carrying the plungers.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the frame or pressure box, which is composed of the side bars a , a , transverse pieces a' , a' , and parallel strips a'' , a'' , all of which are secured firmly together and form rectangular compartments to receive the tobacco.

The pressure bed B consists of the two side bars b , which are extended out to form handles, and the back plate b' is secured to said bars by bolts or equivalent means b'' . This back plate is stamped out of one piece of sheet metal and is provided with the side slots C and intermediate narrow slot c . This back plate may be secured to the side bars by any number of bolts, screws or other desired fastening devices, but it will be found that four bolts, one at each corner, will be sufficient to keep the plate and side bars square with relation to each other, even where the bed is subjected to very rough usage. Where the back plate consists of individual strips, the bed will get knocked out of its square position in continual use, and the plugs will have irregular and rough edges which render them inferior as commercial articles. The sections or blocks D are arranged across the wide slots C with a small space e between them to receive the parallel strips a'' , a'' , of the frame as shown in Fig. 2. Metallic plates d are secured on the lower faces of these blocks and they project slightly beyond the sides of the block so that they will impinge tightly against the sides of the compartments in the frame and prevent any to-

bacco from getting between the blocks and sides of the compartments.

On the upper side of the back-plate *b'* are a number of plates *F* which are secured to the blocks by bolts, screws or rivets *f* which pass through the back plate and into said blocks. These plates are so arranged that they will form beds fitting snugly in the bottom of the compartments in the frame and prevent any tobacco being forced out under the edges of the frame as the parallel strips *a''* fit in the space between these plates. Between the plates *F* the slots *C* are exposed, and when the device has once been operated, and the frame removed, the tobacco between the blocks may be readily removed by washing or picking it out.

I am aware that changes in the form and proportion of parts and details of construction of the devices herein shown and described as an embodiment of my invention may be made without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes and alterations as fairly fall within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a frame having a series of compartments therein, of a pressure bed comprising the side bars and a back plate stamped out of a single sheet of metal and having suitable slots therein, and the blocks or sections secured to the back plate to extend across the wider slots therein and adapted to be forced into the compartments in the

frame, substantially as and for the purpose set forth.

2. The combination, with a frame having rectangular compartments therein, of a pressure bed comprising the side-bars and the back-plate secured thereto, said plate being stamped out of a single sheet of metal and having a series of slots therein, the blocks or sections secured to said back plate to extend transversely across the wider slots and forming intermediate spaces to receive the side walls of the compartments in the frame and the plates *d* secured on said blocks and adapted to fit snugly in the compartments, substantially as described.

3. The combination with a frame having a series of compartments therein, of a pressure bed comprising the side bars and the back plate stamped out of a single sheet of metal and having a series of slots therein, the blocks secured to said plates so as to extend across the wider slots and adapted to fit snugly in the compartments in the frame, said blocks being spaced apart to receive the sides of the compartments between them, the plates *d* secured on the bottom of said blocks and the plates *F* secured to said blocks on top of the back plate and arranged to fit up into the compartments of the frame placed above the pressure bed, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT M. VAUGHAN.

Witnesses:

WM. H. CULLINGWORTH,
W. J. TAYLOR.