

W. H. Watson,
Tobacco Press,
No 55,937, *Patented June 26, 1866.*

Fig. 1.

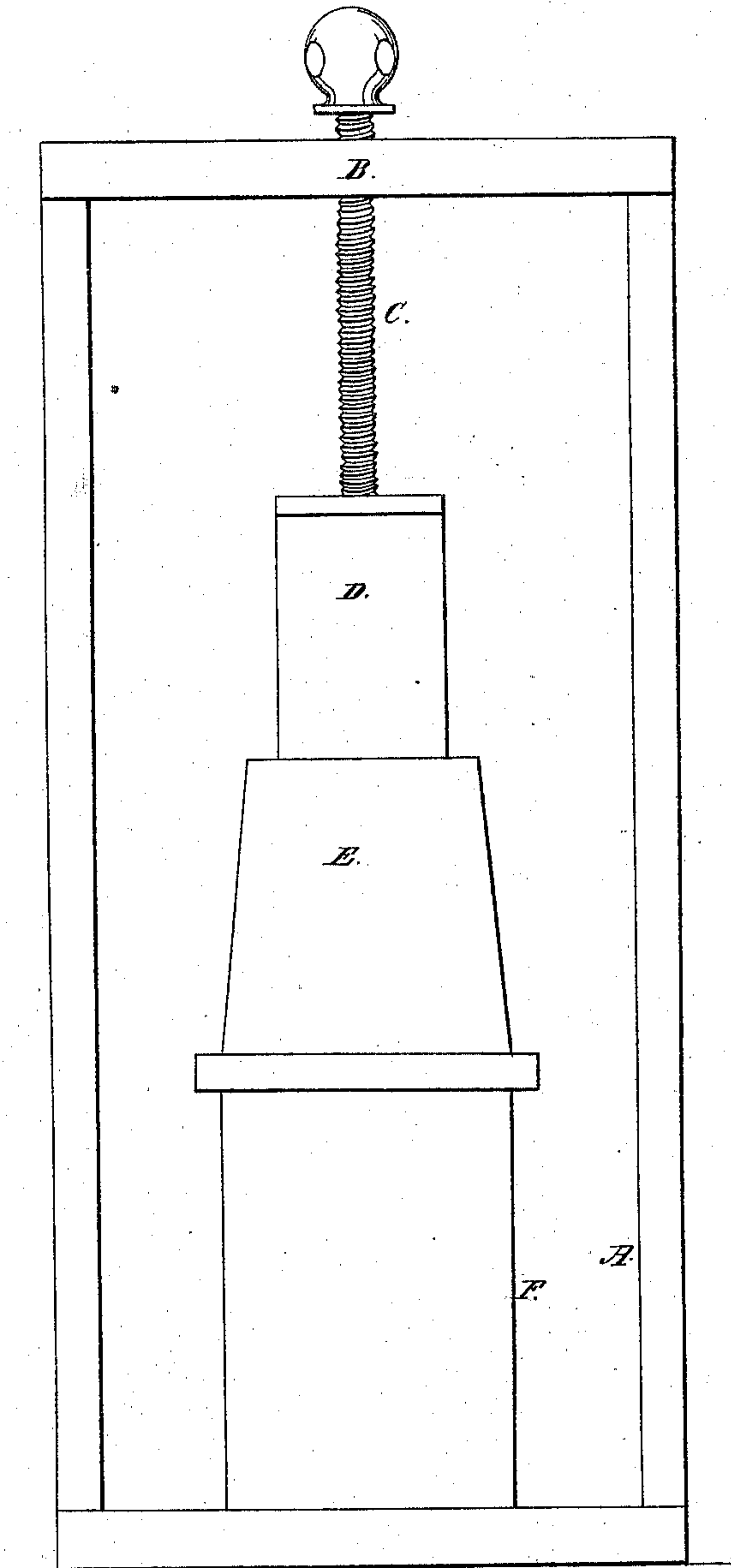


Fig. 2.

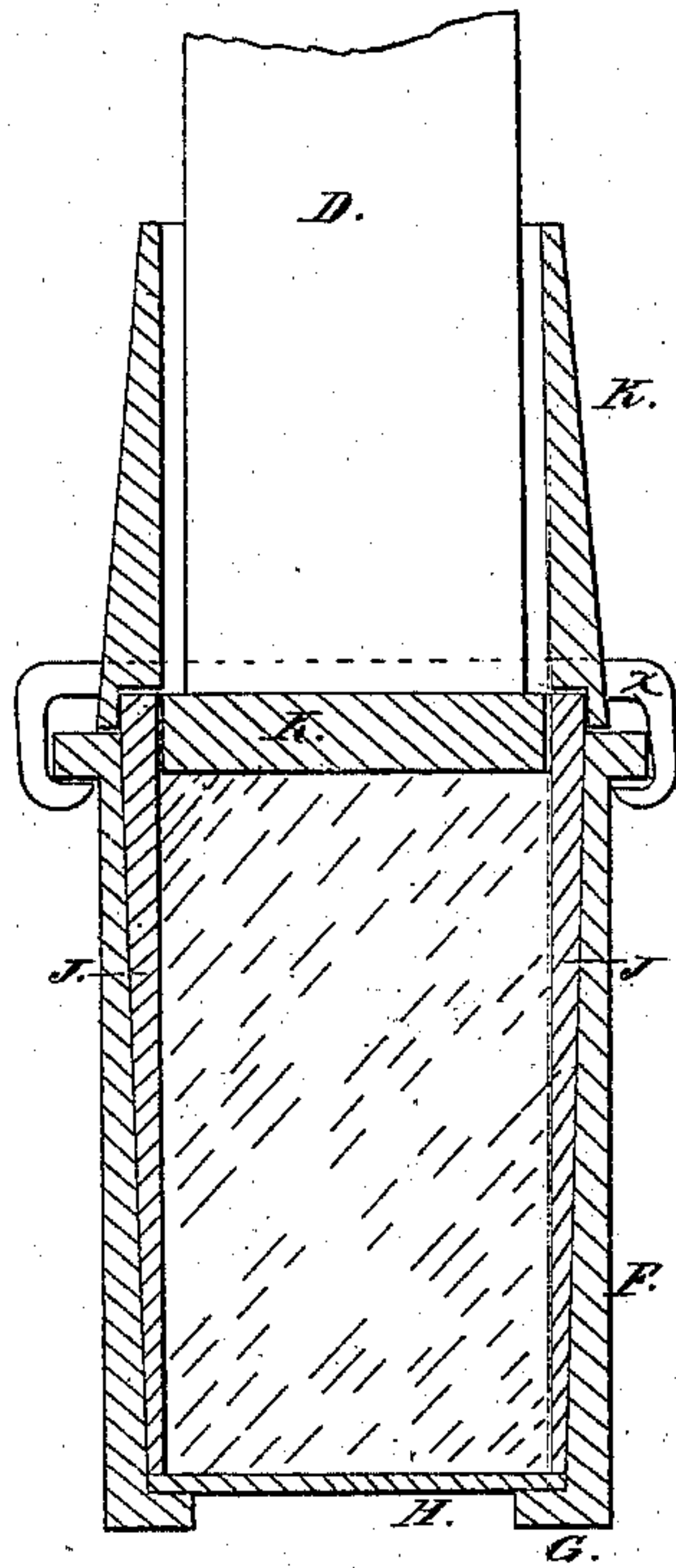
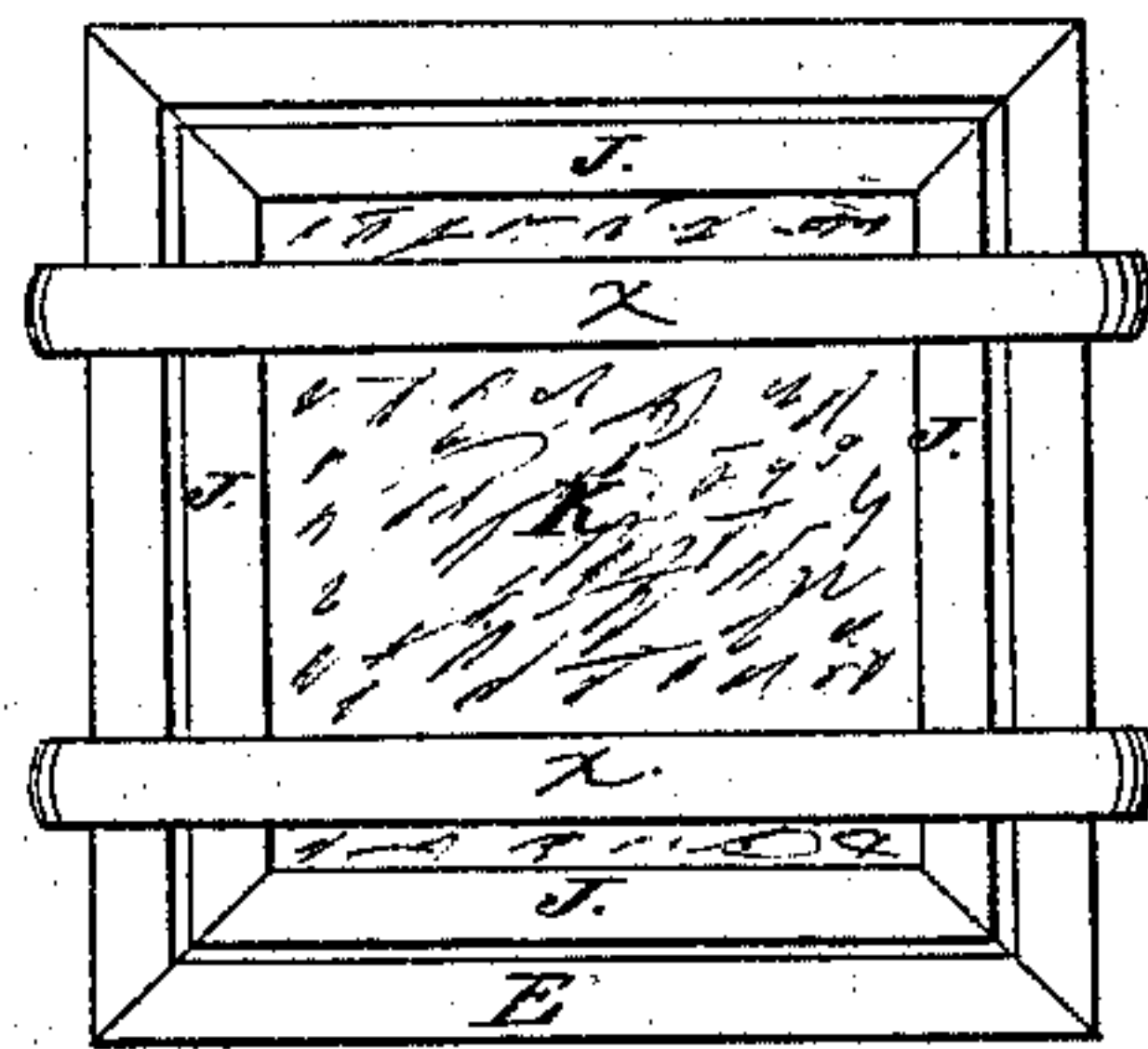


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

W. H. WATSON, OF YONKERS, NEW YORK.

IMPROVEMENT IN TOBACCO-PRESSES.

Specification forming part of Letters Patent No. 55,937, dated June 26, 1866.

To all whom it may concern:

Be it known that I, WILLIAM H. WATSON, of Yonkers, in the county of Westchester and State of New York, have invented, made, and applied to use certain new and useful improvements in the construction and operation of boxes for pressing tobacco, herbs, and other substances to be pressed; and I do declare the following to be a full, clear, and correct description of my invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a front view of my improved box, showing the same in position in the press employed; Fig. 2, a sectional view of the same, showing more particularly the peculiar construction of my improved box; Fig. 3, top view of box, showing the same filled with tobacco, herbs, or other substances.

In the drawings like parts of the invention are pointed out by the same letters of reference.

The nature of my invention consists, (a,) in the construction and operation of the secondary or interior box, as hereinafter fully shown; (b,) in combining with the same the outer case and top plate, as well as the clamps, for the purposes hereinafter described.

To enable others skilled in the arts to make and use my invention, I will speak of the construction and operation of the same.

A shows the frame-work of the press used or employed for pressing the tobacco, herbs, or other substances to be pressed, and B is the head-block of the same, through the center of which is inserted the screw C, attached to a plunger, D.

D shows a plunger made in the ordinary way and attached to the screw C, by which it is operated.

E is a hopper placed over and upon the inner and outer cases or boxes, into which hopper E the tobacco, herbs, or other substance to be pressed is fed, and which hopper E is made sufficiently large to allow the plunger D to pass within it.

F shows the outer case or box, made of any suitable metal. This box F is made larger inside at its top than at its bottom, and its lower end is provided with a ledge, G, upon which rests the removable bottom H.

J shows four plates, of metal or any suitable material, made tapering from their top to their bottom and having their edges beveled, so that when placed in position within the outer case or box, F, they shall form with the removable bottom H a secondary case or box having straight ends and sides inside.

K is a top plate, also removable, placed directly above and upon the tobacco, herbs, or other substance to be pressed.

The various parts of my improved box being thus constructed, the operation is as follows: The removable bottom H is placed in position upon the ledge G of the outer case. The four plates J are then placed in position within this outer case, their bottom ends resting upon the bottom H. The hopper may then be placed directly over and resting upon the outer and inner cases or boxes. The requisite quantity of tobacco, herbs, or other substance to be pressed is then filled into the inner case, and the hopper and the top plate being placed over the same, it is ready for pressing. The various parts just described are then placed upon the platform of the press, directly below the plunger, which rests above the top plate, and motion being imparted to the plunger the same descends, pressing the tobacco, herbs, or other substance contained in the inner case compactly and closely together, the plunger descending until the top plate is brought on a level with the top of the inner case. The hopper may now be raised a sufficient distance above the box, the plunger still resting upon the top plate, to allow the clamps *x* to be placed in position over the top plate for the purpose of holding the same down, thus keeping the tobacco, herbs, or other substance under pressure until the same shall be removed from the cases.

To remove the tobacco, herbs, or other substance thus pressed, the clamps are first removed and the contents of the box, with the inner box and bottom and top plates, are forced out by pressing upon and raising the removable bottom, thus raising free from the outer box or case the inner box or case. The same thus being removed from the outer case, the bottom and plates constituting the same are readily separated from the pressed material.

Various forms may be given to the pressed

material by the use of different-shaped interior boxes and pressing-plates, and when a different-shaped interior box is used the hopper is varied in form to correspond with the interior box used.

My improvement in boxes may be used in combination with any convenient method of pressing, and my invention will be found particularly valuable in pressing tobacco used for smoking.

The mode now practiced in pressing smoking-tobacco preparatory to baling the same is by incasing in heavy frame-work a nest of cells or boxes of wood—say twenty-five (25) to seventy-five (75) boxes or cells in a nest—placing the same within a press, where they are filled with the tobacco to be pressed, and the tobacco having been pressed, it is kept under pressure in the press for twelve (12) or twenty-four (24) hours in order that it may harden. A plunger and heavy sledge-hammer are then employed to force the tobacco out of the cell, by which operation many of the cakes are broken or cracked.

This mode of pressing tobacco as contrasted with my proposed method is open to the following objections: First, presses varying in power from seventy-five (75) to one hundred and fifty (150) tons are required to press a nest of boxes, thus rendering the cost of the machinery employed expensive; second, the necessity of keeping the tobacco under pressure after it has been pressed, in order that it may harden, requires the employment of many press-

es; third, the boxes and casing at present employed are necessarily heavy, unwieldy, and require the labor of two men to handle them. The cells soon become unfit for use and require constant repair.

By the use of my proposed improvement a much more perfect form or shape can be given to the substance pressed. The same is much more readily and rapidly removed from its position within the box, while the non-necessity of keeping the box and its contents under pressure within the press that it may harden enables me with one man to do my work very much more economically and speedily, a light, small press being employed, as only one charge is pressed at a time, while the cost of labor incident upon the same is greatly reduced.

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

1. The inner or secondary box, constructed and operating substantially as described, for the purposes set forth.
2. In combination with the same, the outer box, top plate, and clamps, when the same shall be constructed, combined, and operated substantially as shown.

W. H. WATSON.

In presence of—

A. SIDNEY DOANE,
S. M. OSTRANDER.