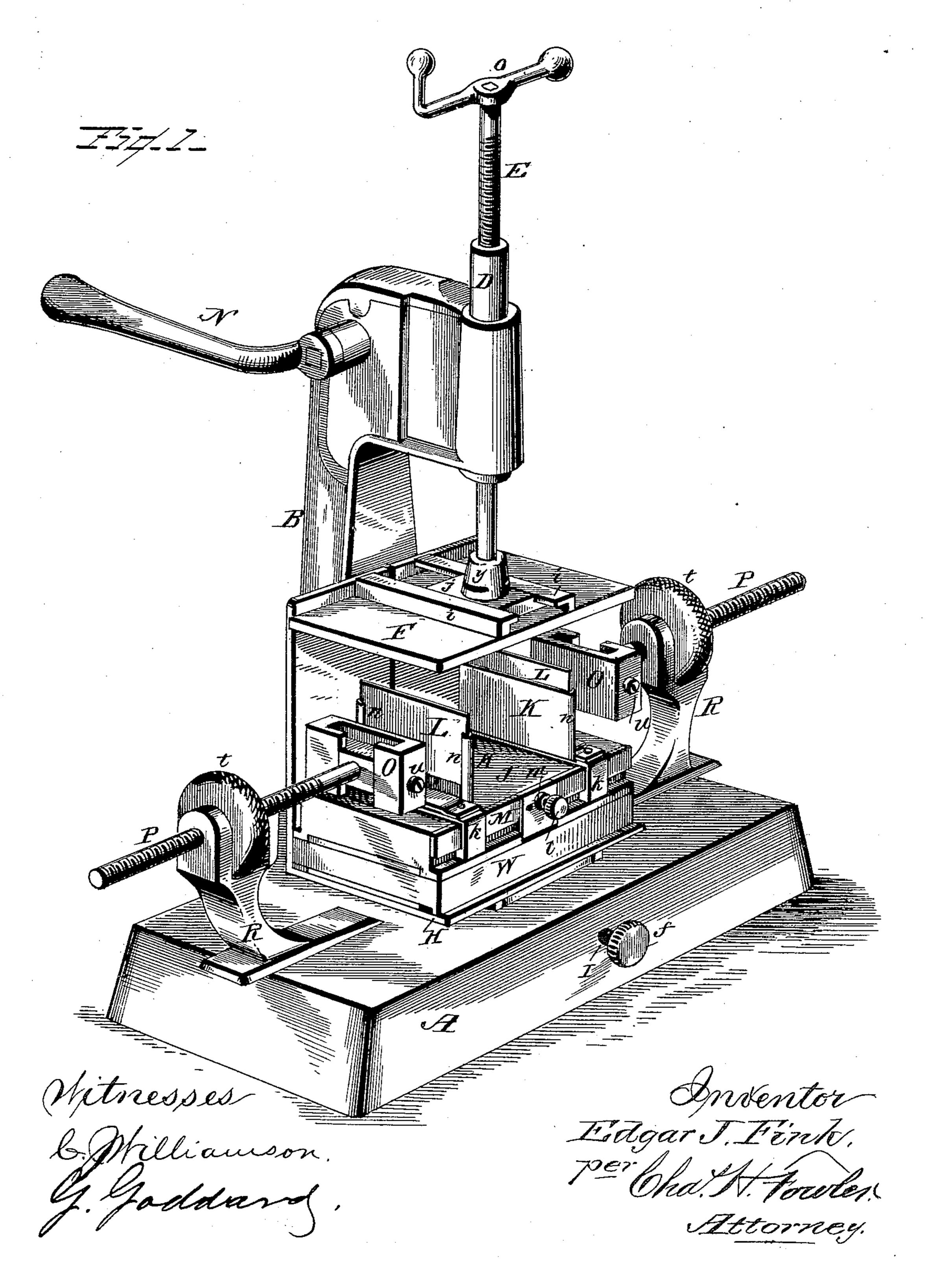
(No Model.)

3 Sheets—Sheet 1.

E. J. FINK. CIGAR PRESS.

No. 529,254.

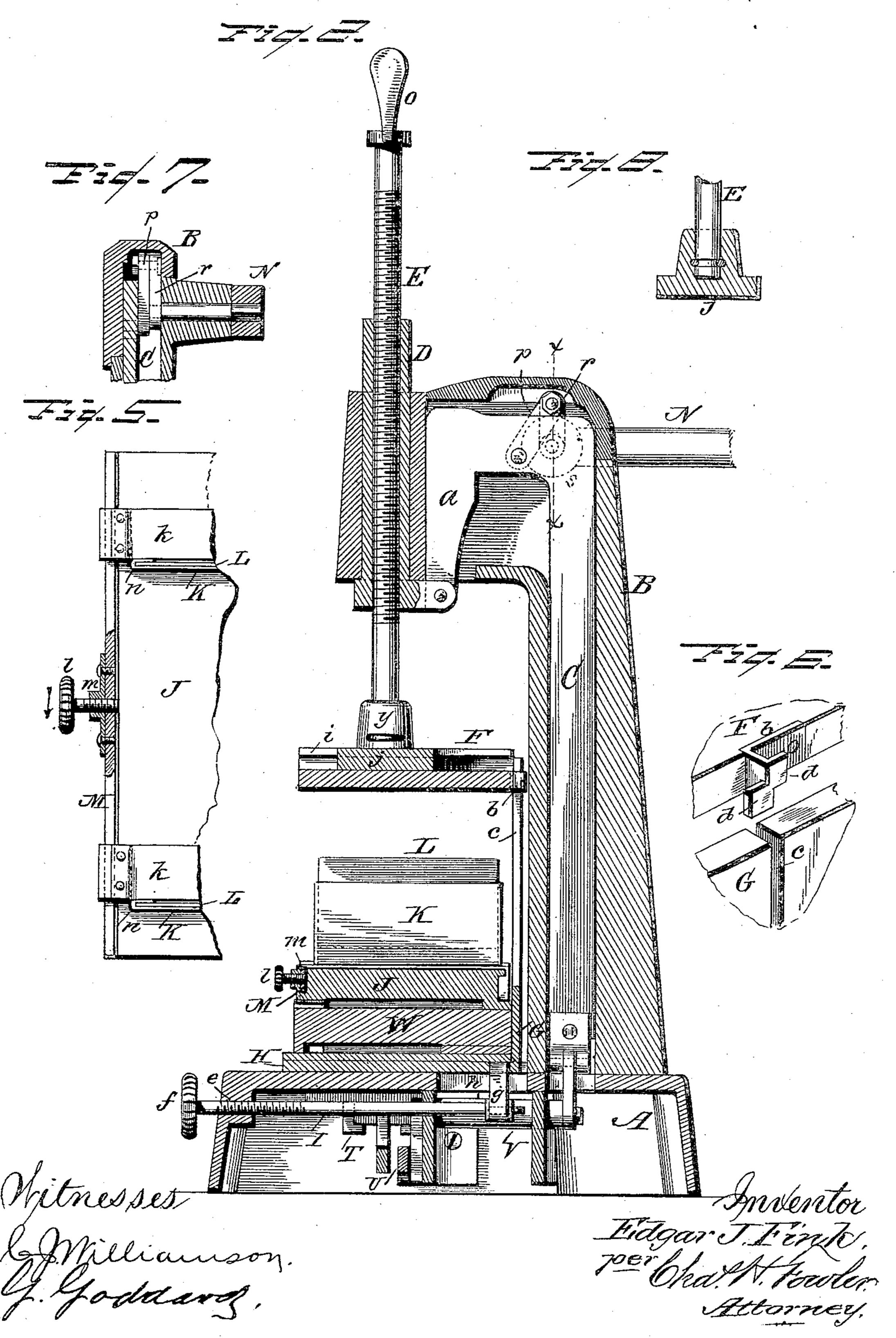
Patented Nov. 13, 1894.



E. J. FINK. CIGAR PRESS.

No. 529,254.

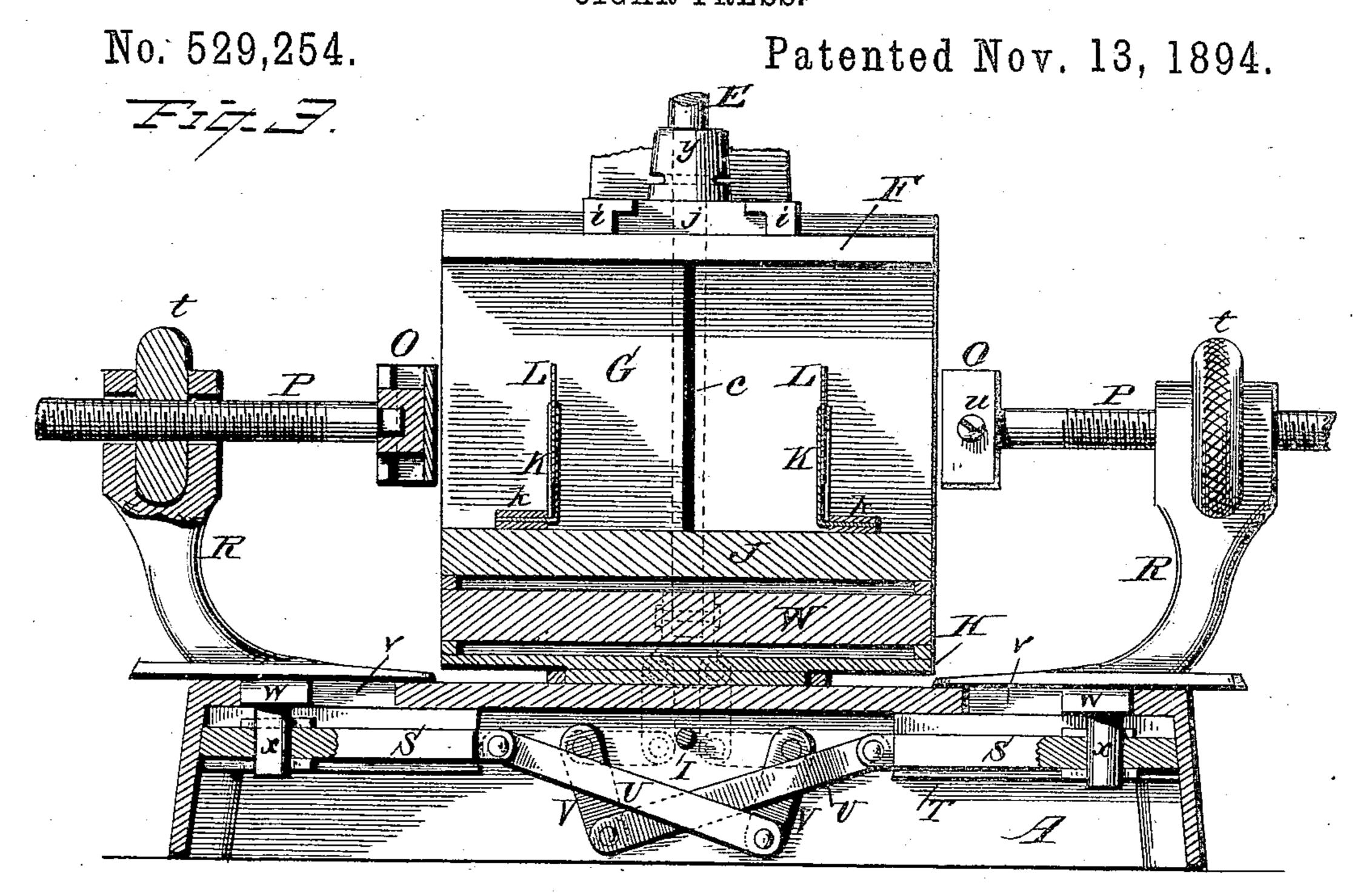
Patented Nov. 13, 1894.

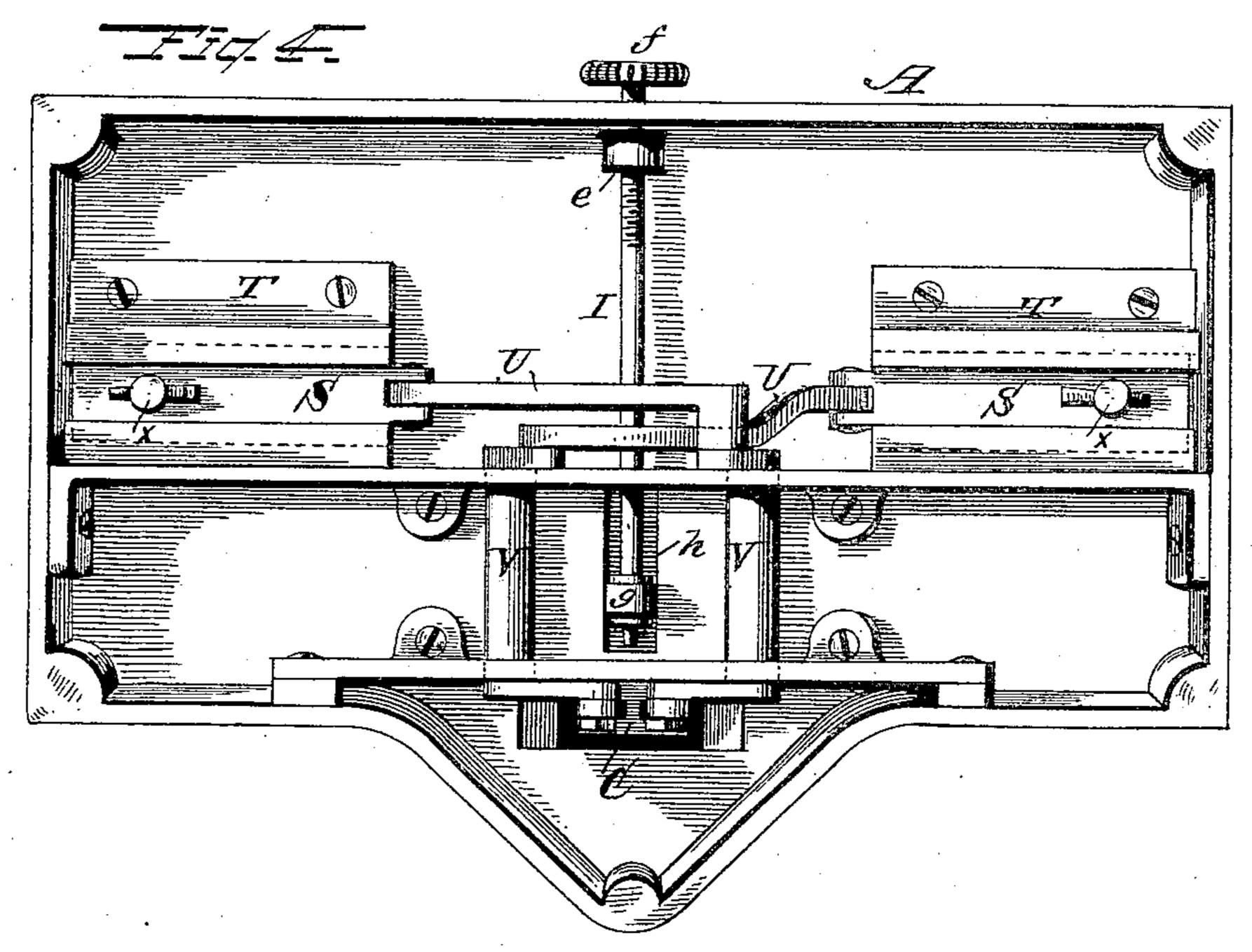


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3 Sheets—Sheet 3.

E. J. FINK.
CIGAR PRESS.





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Fredger J. Finto. Per Chat Attour

United States Patent Office.

EDGAR J. FINK, OF HANOVER, PENNSYLVANIA.

CIGAR-PRESS.

SPECIFICATION forming part of Letters Patent No. 529,254, dated November 13, 1894.

Application filed July 10, 1894. Serial No. 517,082. (No model.)

To all whom it may concern:

Beit known that I, EDGAR J. FINK, a citizen of the United States, residing at Hanover, in the county of York and State of Pennsylva-5 nia, have invented certain new and useful Improvements in Cigar-Presses; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, 10 making a part of this specification, and to the

letters of reference marked thereon.

The present invention has for its object to provide a machine for pressing and bundling cigars that will be effective in its operation 15 and possess the required strength and durability necessary to successfully and quickly press the cigars ready to be placed in the box, which objects I attain by a machine constructed substantially as shown in the draw-20 ings and hereinafter described and claimed.

Figure 1 of the drawings is a perspective view of a machine constructed in accordance with my invention; Fig. 2, a vertical section thereof; Fig. 3, a longitudinal vertical section 25 showing the upper portion partly broken away; Fig. 4, an under side plan view of the hollow base for supporting the several operating parts of the machine; Fig. 5, a detail plan view partly in section of the bottom of the 30 bundling device; Fig. 6, a detail view in perspective showing the means employed for guiding the presser-head in its vertical movement; Fig. 7, a detail sectional view of the connection between the vertical operating le-35 ver and handle; Fig. S, a detail sectional view showing the swivel connection between the shaft and presser-head.

In the accompanying drawings A represents a hollow base of any suitable size and 40 construction and B the standard thereto. The standard is formed hollow and contains a lever C, which lever at its upper end has an extension a to which is connected a sleeve D, which sleeve has interior screw-threads with which engage the screw-threaded rod E, and to the lower end of this rod is connected the presser-head F. To guide the presser-head in its vertical movement, there is connected to said head a guide-plate b which engages 50 with a vertical slot c in the back G of a support H. This guide-plate may be of any suitable construction found best adapted to the

purpose, and if desired it may be provided with one or more flanges d to bear against the side of the slotted back G to keep the 55 presser-head in engagement therewith. This support H which rests upon the hollow base A is bodily movable by means of an adjusting screw-rod engaging with a screw threaded hole e in the hollow base and provided with 60 a thumb-nut f for turning it. The inner end of the rod I loosely connects with a $\log g$ upon the support H, said lug extending down through an elongated slot h in the hollow base A. The rod I may be connected to the 65 lug in any suitable manner that will allow of the rod turning in order to adjust the position of the support H by moving it in or out. To admit of this adjustment of the support H with its slotted-back G, the presser-head F 70 is connected to the lower end of the rod E in such manner as will admit of the presserhead moving with the support H while the

rod E remains stationary.

To render the presser-head adjustable with 75 relation to the screw rod to which it is connected, the presser-head is provided with rabbeted flanges i with which engage the rabbeted edges upon a block j suitably connected to the rod. Any preferred and well known means 80 may be provided for connecting the presserhead with the rod so long as it will admit of its proper adjustment to correspond with the adjustment of the support hereinbefore described. The bundling device rests upon the 85 support H and consists of the bottom J provided with laterally and horizontally adjustable sides K, which sides have extensible sections L. The means considered most preferable in rendering the sides of the bundling de- 90 vice adjustable and also the extensible sections movable with relation thereto, are as follows: The sides K are connected to suitable flanged straps k which overlap the edges of the bottom J, and between the flanged ends of the 95 straps and the front edge of the bottom is disposed a friction bar M which is operated by a thumb-screw l. This screw engages. with a stationary nut m fixed to the bar and by turning the screw in the direction of 100 the arrow indicated in Fig. 5 of the drawings, the bar will be forced outward against flanged ends of the straps k and hold them stationary by frictional contact therewith,

thereby enabling the sides K to be held in their adjusted position. By turning the thumb-screw in the opposite direction the pressure upon the bar is removed thus allow-5 ing the free adjustment of sides by moving them laterally and horizontally to adapt the bundling device to receive any number of cigars in a layer and any number of layers by increasing the height of the sides through 10 the medium of the extensible sections. These extensible sections L may be connected to the sides K in any suitable manner that will allow of their moving vertically, and in the present instance I have shown the sections

15 as engaging with flanges n on the sides K, but any other desirable means may be employed to adjustably hold the sections to the sides.

The adjusting screw-rod E is provided at 20 its upper end with a suitable handle o for operating it, so that the extent of movement may be determined and the pressure upon the cigars regulated when the presser-head is brought down thereon by means of the

25 lever C. The lever C is connected with a crank-shaft by means of a link p which is pivotally connected to the lever and to the crank end r of the shaft s, as shown in Fig. 7 of the drawings. A suitable handle N is 30 connected to the flat sided end of the shaft for

operating it.

The means employed for operating the lever is one of many that may be used, and any device or arrangement of devices for raising 35 and lowering the lever may be substituted as found most preferable. Bracing heads O are employed to form braces and supports to the sides L when the presser-head F is brought down upon the cigars, said bracing-heads be-40 ing adjustably connected to screw-rods P which have their bearings in suitable brack. ets R. These screw-rods P are moved back and forth as circumstances require by means of thumb-nuts t engaging with the screw threads upon the rods, and the bracing-heads O are capable of vertical adjustment by

gage blocks upon the ends of the screw-rods. This adjustment of the bracing-heads O 50 adapts the heads to the extensible sections L when raised to bundle a full box of one hundred eigars, said bracing-heads being held in their adjusted position by means of set screws u. The bracing-heads may be rendered ad-

means of grooves in the heads with which en-

55 justable upon the screw-rods in any suitable manner and any form of head may be substi-

tuted for that shown.

To enable the bracing-heads O moving simultaneously with the downward movement 60 of the presser-head F, the brackets R which carry the screw-rods P to which the bracingheads are attached, are connected with the lever C by means of suitable mechanism, The intermediate connections between the 55 brackets and lever may be of any suitable and well known construction, and I have shown one of many forms which will serve I

the purpose. The means which is considered the most simple consists in the blocks wextending into elongated slots v in the hollow 70 base A, said blocks having pins x depending therefrom, to which are suitably connected bars S adapted to slide in guides T. These bars have pivotally connected to them suitable arms U and the arms are in turn pivot- 75 ally connected to the crank-shafts V, which shafts have cranks upon their opposite ends and are pivotally connected to the lower end of the lever C, as shown more clearly in Fig. 4 of the drawings.

The screw-rod E is connected to the block j by means of any well known swivel attachment that will admit the shaft to turn independently of the block. In the present instance I have shown a socket y upon the block 85 in which the ends of the rods fit and are held in place by a piece of wire or by any other means found desirable, this particular construction being shown in Fig. 8 of the drawings.

I do not wish to be understood as limiting myself to the precise construction shown, as many changes and modifications may be made in the several details of construction without departing from the principle of my 95

invention. In the operation of the machine, the bundling device should be first adjusted to adapt it to the number of cigars which it is desired to press, as well as the number of layers, 100 depending upon the size of box which is to contain the cigars. The sides K are therefore moved nearer to or farther from each other as the case may be and held in their adjusted position by means of the friction-bar M which 105 is operated by the thumb screw l hereinbefore described. The sides now being properly adjusted, the extensible sections L are raised any height required by the number of layers of cigars placed between the sides. The bun- 110 dling device supplied with the desired number of cigars to be pressed, is now placed on the support H, which support has been previously adjusted to adapt it to the length of cigar to be pressed. This changing of the 115 position of the support H for the purpose above described is accomplished by means of the screw-rod I hereinbefore referred to. The bundling device being in position shown in the drawings, the handle N is now turned 120 which will force down the presser-head F through its connections with the lever C. As this is being accomplished, the bracing-heads O will be moved up in position against the sides K of the bundling device through its 125 connections with the lever C, the presser-head and the bracing heads moving simultaneously. The presser-head as it descends will strike the upper edge of the extensible sections Land force them down to a level with the 130 top of the upper layer of cigars, thereby acting automatically to adapt themselves to the compressing of the cigars by the presser head when it is brought down thereon. The move-

ment of the bracing-heads being simultaneous with that of the presser-head, when brought in position, they will form a support for the sides of the bundling device and prevent them from collapsing or being pressed outward when the cigars are compressed. When taken in connection with the presser-head and the bracing heads and the means for simultaneously operating them, and suitable bundling device any means may be employed that will hold the desired number of cigars while being

compressed.

The adjustability of the presser-head and also the bracing-heads upon their respective screw-shafts are considered of importance; also the adjustability of the support for the bundling device enables the machine to be worked with more satisfaction as it can be made to adapt itself to the requirements of a press of this character. A further feature of the screw-shafts which carry the presser-head and the bracing-heads respectively, are the provisions made for their adjustment to adapt them to the width and height of the bundle of cigars or the number of cigars to be pressed.

The sides of the bundling device and the means of adjustment as well as the extensible sections thereto, are all considered of importance to make up a perfect machine.

To elevate the bundling device, a block W may be used which is placed between the support H and the bottom J thus raising the device when a shallow box of cigars is to be pressed.

Having now fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. A machine for pressing cigars, consisting of means for holding the cigars a vertically movable shaft having independent means of vertical adjustment, and a presser head adjustably connected to the shaft, substantially as and for the purpose specified.

2. In a machine for pressing cigars, a vertically movable presser head, horizontally adjustable shafts, bracing-heads adjustably connected to the shafts, and intermediate mechanism connecting the presser-head with the bracing-heads whereby they will act simultaneously, substantially as and for the purpose set forth.

3. A machine for pressing cigars, consisting of a vertically operating shaft, a presser head adjustably connected thereto, horizontal shafts and bracing-heads adjustable on said shafts, and a means for holding the cigars and an adjustable support therefor, substantially as and for the purpose set forth.

4. A machine for pressing cigars, provided with a presser-head and means for operating it, and a bundling device provided with laterally adjustable sides and extensible sections connecting with the sides, substantially

as and for the purpose set forth.

5. In a machine for pressing cigars, a vertically movable presser-head, horizontally movable bracing-heads operatively connected thereto whereby they will act simultaneously, a bundling device and a support therefor having a slotted back and a guide plate upon the presser-head engaging with the slot to guide the head in its vertical movement, substantially as and for the purpose described.

6. In a machine for pressing cigars and a 75 bundling device therefor, said device having laterally adjustable sides and means for holding them in their adjusted position, consisting of a friction bar, and a thumb-screw for operating it, substantially as and for the pur- 80

pose set forth.

7. In a machine for pressing cigars, a vertically movable shaft having a presser head suitably connected thereto, and horizontal shafts provided with bracing-heads adjustably connected thereto, and a bundling device and a support therefor, and means for moving the support across the base of the machine, substantially as and for the purpose specified.

8. In a machine for pressing cigars, a vertically movable shaft, an adjustable presserhead secured to the shaft by a swivel connection, means for adjusting the shaft independently of its vertical movement, movable pendently of its vertical movement, movable brackets and shafts adjustably connected thereto, bracing-heads adjustably connected to the shafts, and a bundling device having adjustable sides and extensible sections connected thereto, substantially as and for the 100

9. In a machine for pressing cigars, a vertically movable and adjustable shaft, a presserhead secured thereto by a swivel connection, said head being movable independently of the shaft, movable brackets having longitudinally adjustable shafts, bracing heads adjustably connected to the shafts, and means for imparting to the presser-head and the bracingheads a simultaneous movement, substan-

tially as and for the purpose set forth.

10. A machine for pressing cigars, consisting of a hollow base, a suitable standard thereon, a vertically movable lever located within the standard, a presser-head and shaft connecting with the lever, brackets and horizontal shafts thereon, bracing-heads upon the ends of the shafts, means for connecting the brackets with the lever whereby a simultaneous movement is imparted to the presser 120 head and the bracing-heads, an adjustable support and a bundling device resting thereon, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence 125 of two witnesses.

EDGAR J. FINK.

Witnesses:

C. M. WINEBRENNER, A. N. MICHAEL,