

(No Model.)

2 Sheets—Sheet 1.

R. D. THOMPSON.

COTTON PRESS.

No. 284,259.

Patented Sept. 4, 1883.

Fig. 1

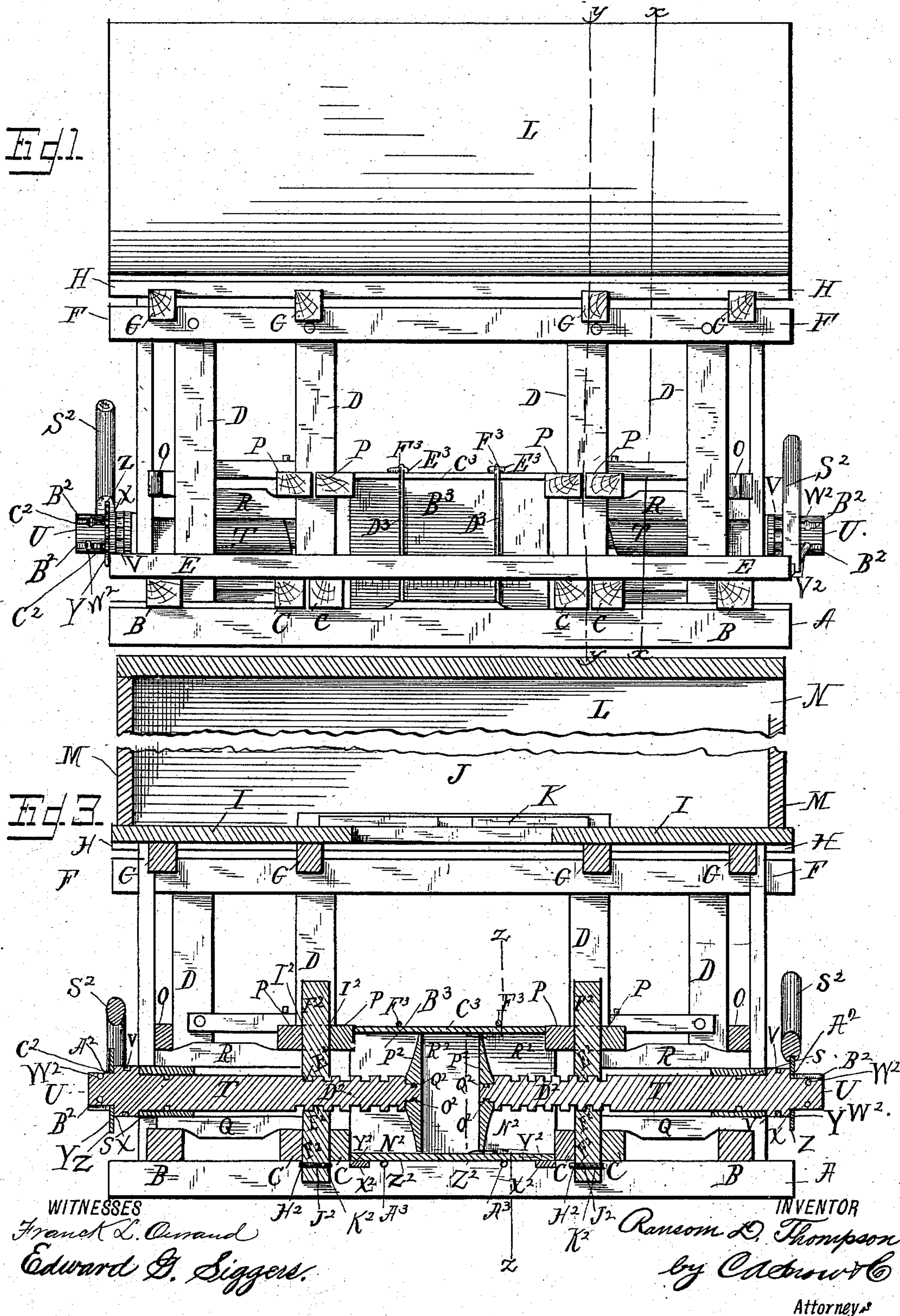
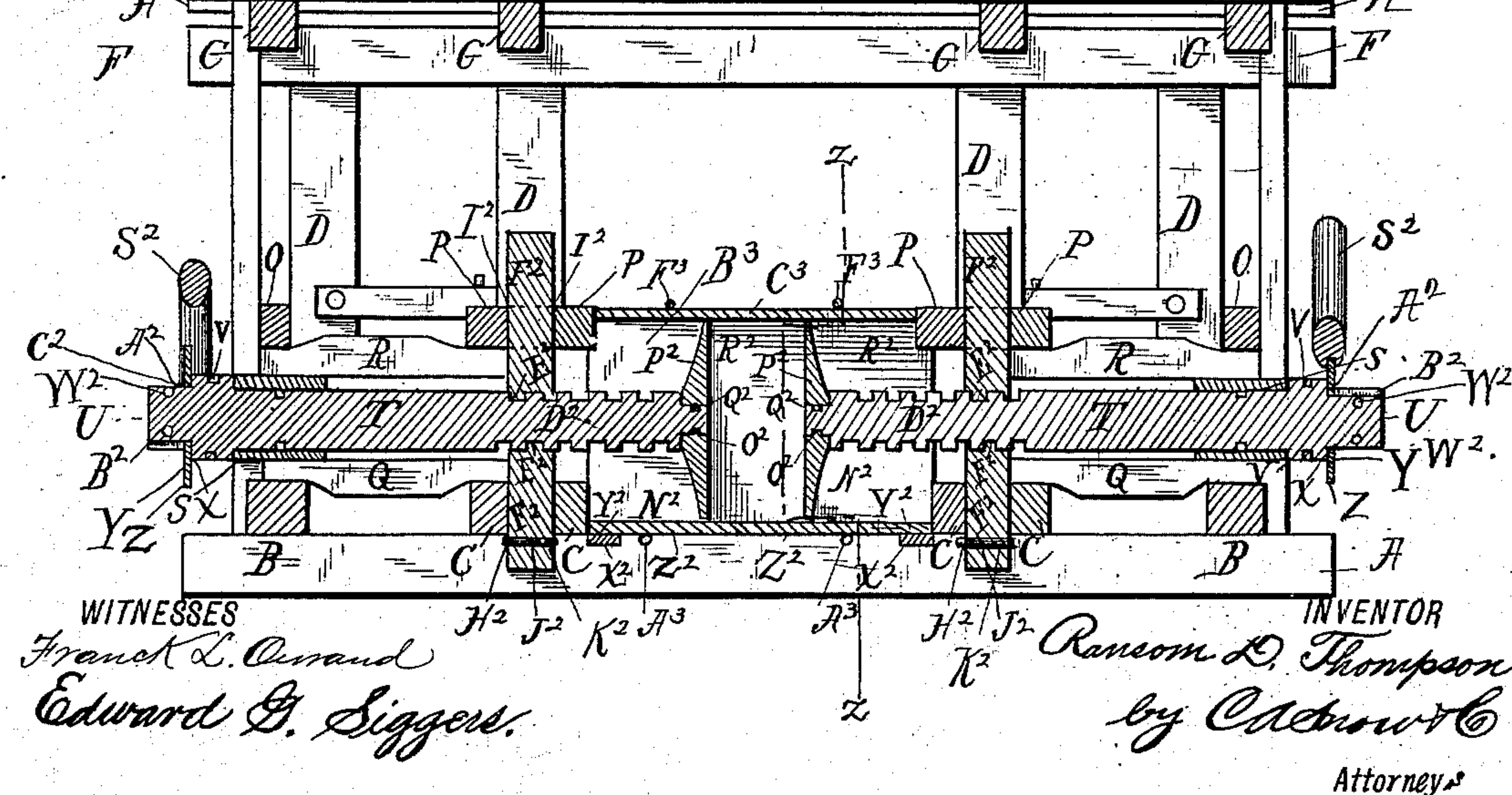


Fig. 2





(No Model.)

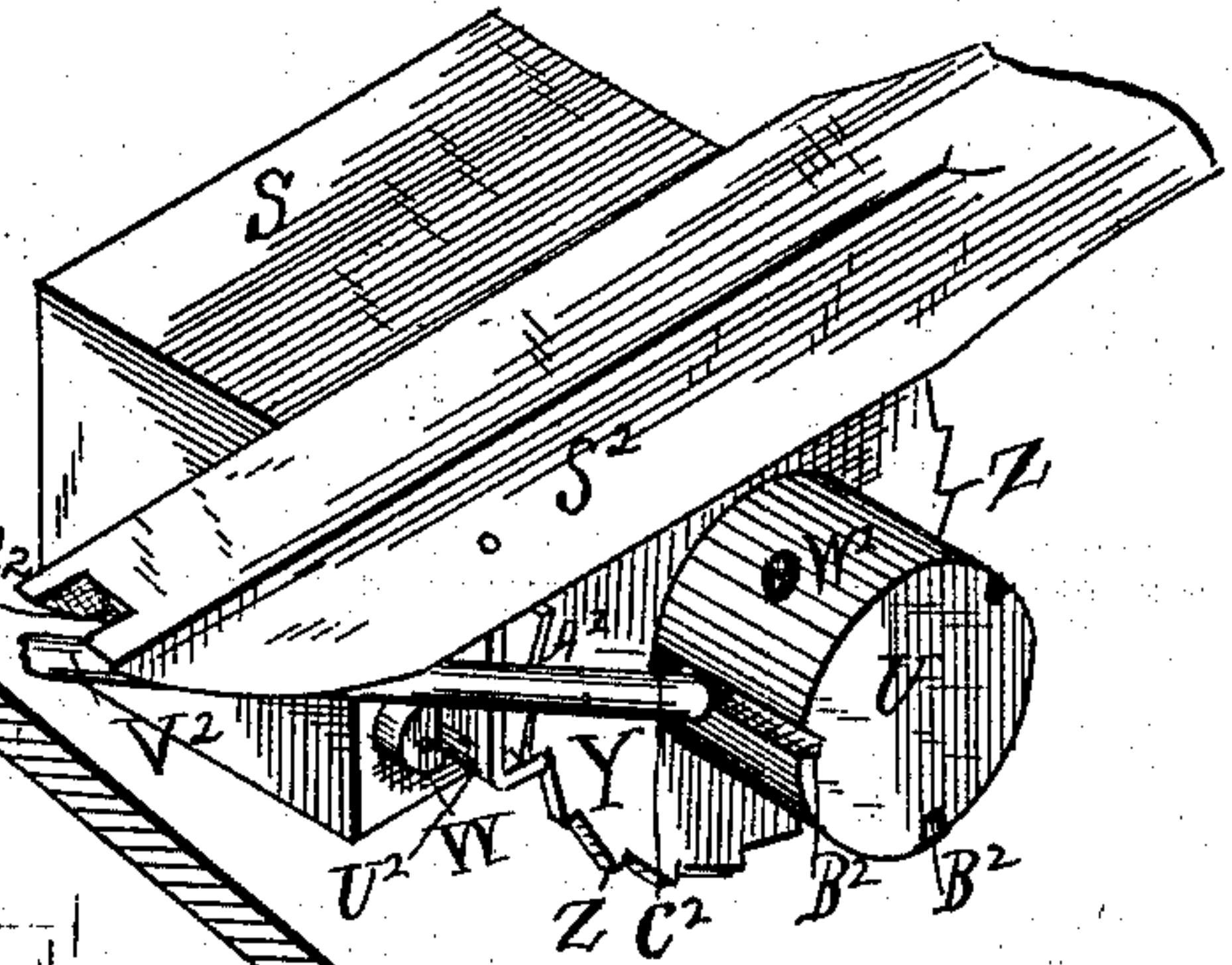
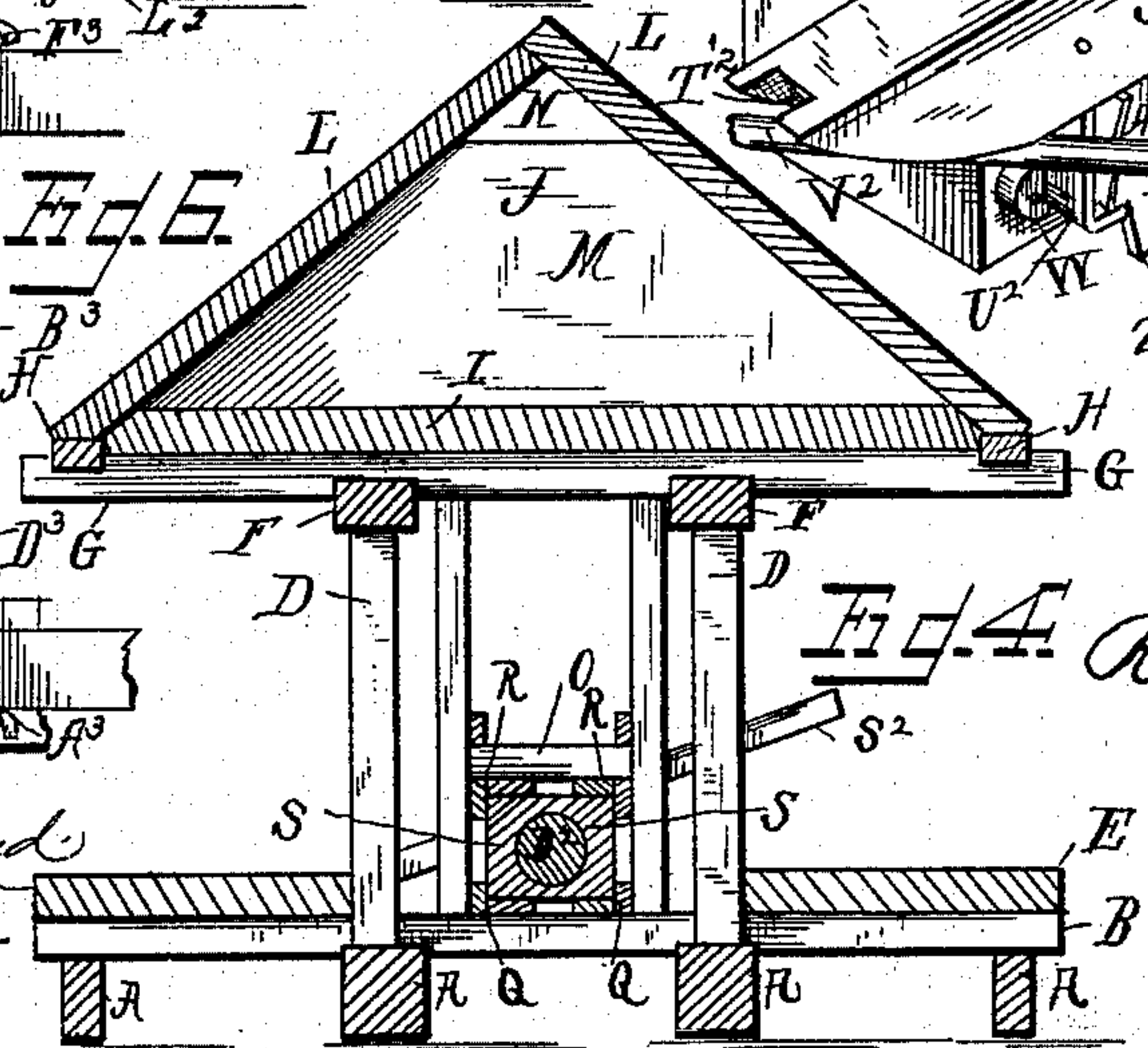
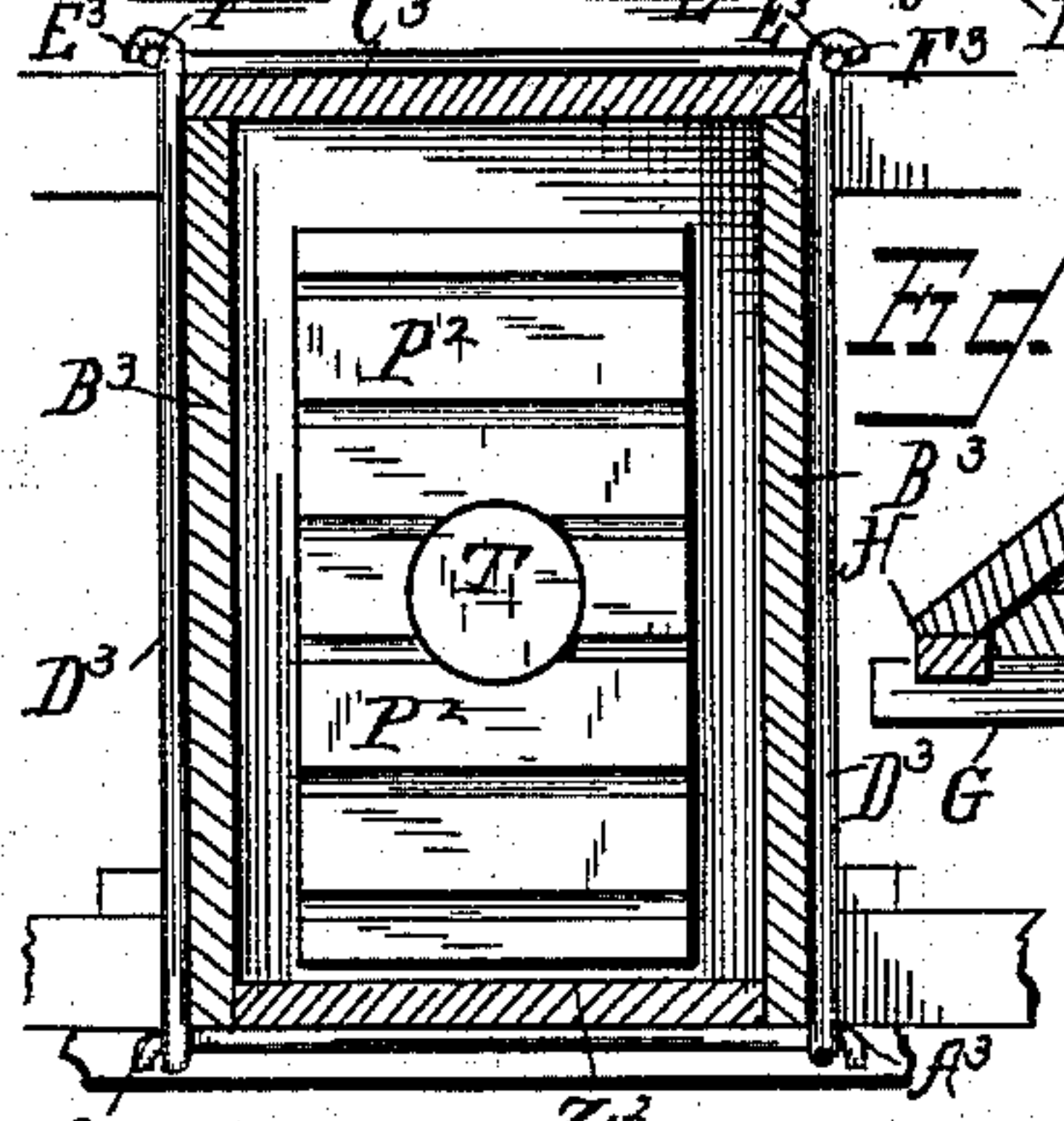
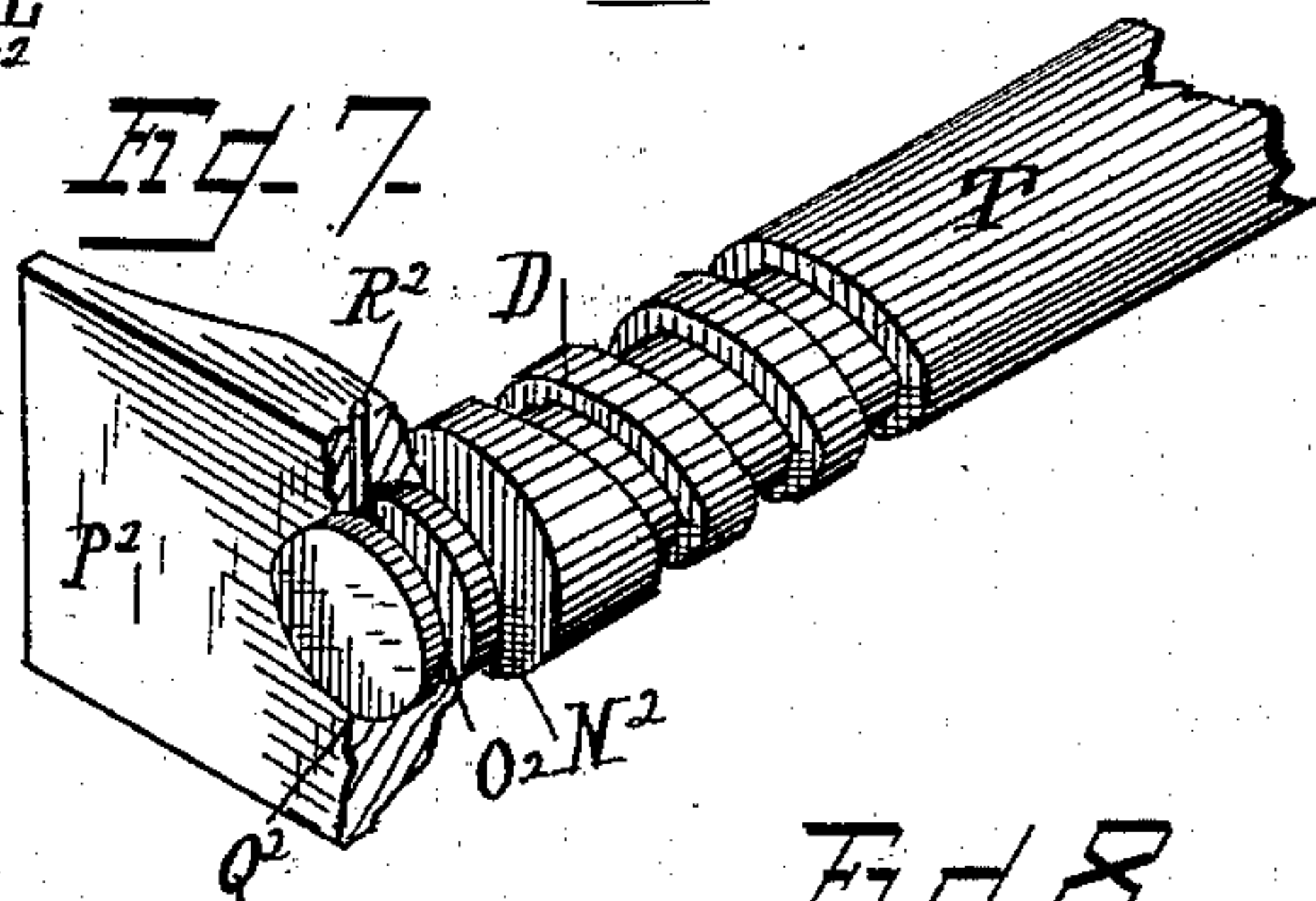
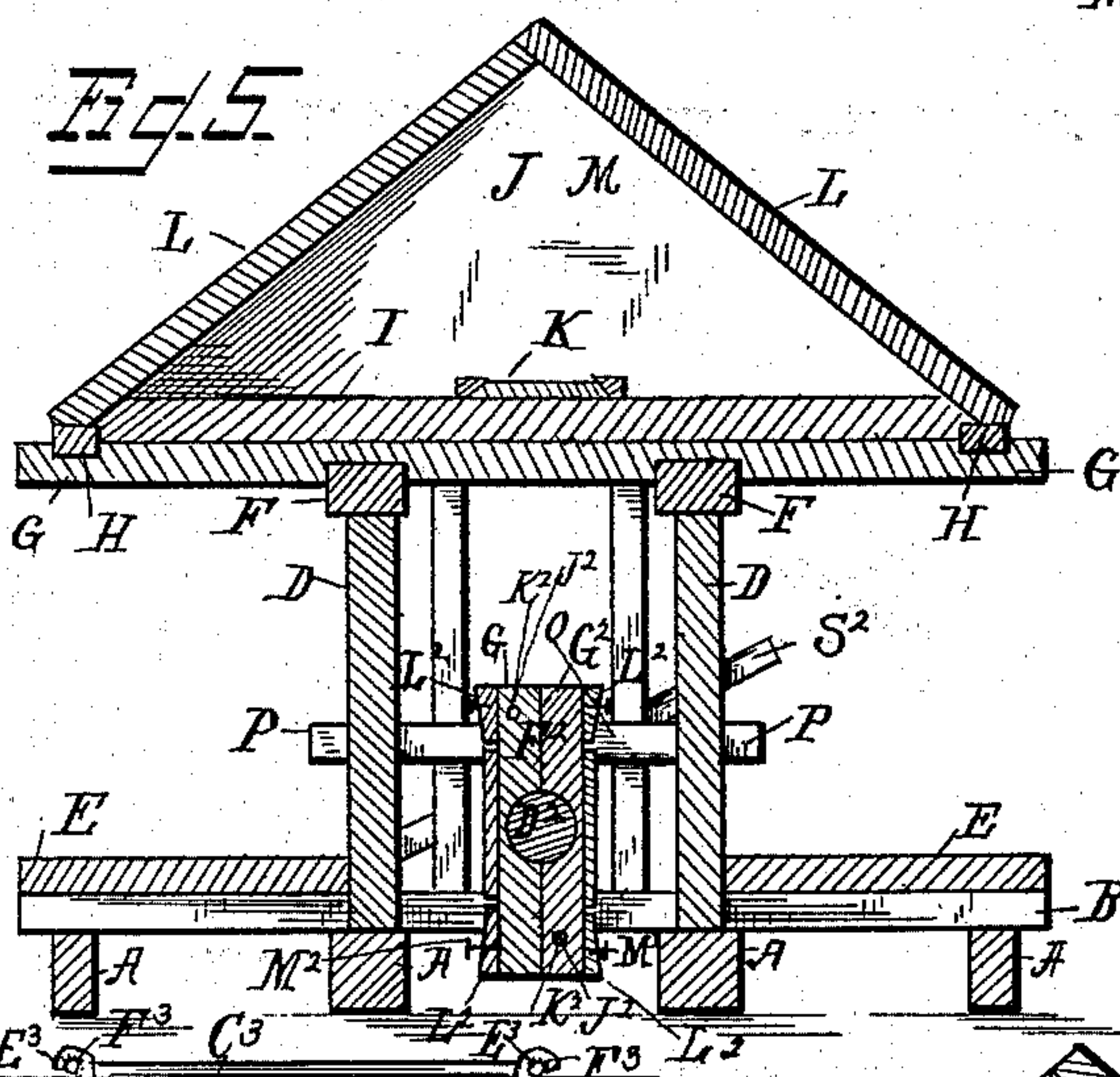
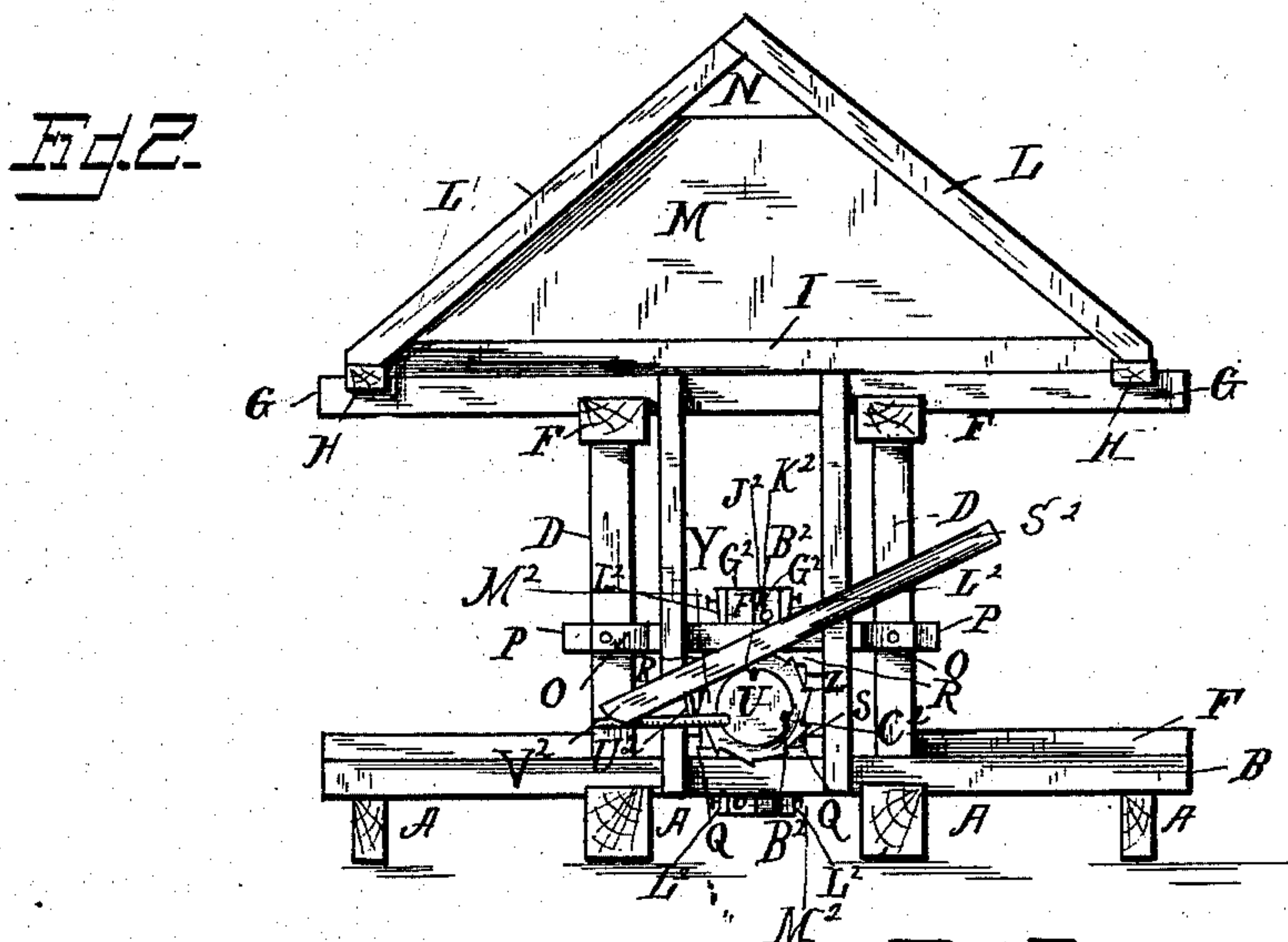
2 Sheets—Sheet 2.

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WITNESSES  
*Frank L. Curand*  
*E. J. Siggers*

Fig. 4 R. D. Thompson.  
INVENTOR  
by C. Snow & Co.  
Attorneys



# UNITED STATES PATENT OFFICE.

RANSOM DAVID THOMPSON, OF DUMAS, MISSISSIPPI.

## COTTON-PRESS.

SPECIFICATION forming part of Letters Patent No. 284,259, dated September 4, 1883.

Application filed June 28, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, RANSOM D. THOMPSON, a citizen of the United States, residing at Dumas, in the county of Tippah and State of Mississippi, have invented a new and useful Cotton-Press, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to baling-presses of that class which are stationary and are provided with a lint-room above, into which the cotton is fed direct from the flue of the gin; and its object is to provide a press possessing superior advantages in point of simplicity, ease, and convenience in operation, durability, and general efficiency.

In the drawings, Figure 1 is a side elevation of my improved press. Fig. 2 is an end elevation of the same. Fig. 3 is a vertical central longitudinal sectional view thereof. Fig. 4 is a vertical transverse sectional view taken through the guides of the feed-screw block on the line *x x*, Fig. 1. Fig. 5 is a vertical transverse sectional view taken on the line of the screw-threaded bearing of the feed-screw on the line *y y*, Fig. 1. Fig. 6 is a detail transverse sectional view taken through the press-box on the line *z z*, Fig. 3. Fig. 7 is a detail view in perspective and in section, illustrating the attachment of the follower to the feed-screw. Fig. 8 is a detail perspective view of the head of one of the feed-screws.

Referring to the drawings, A designates four parallel horizontal longitudinal base-beams, on which is secured a transverse series of sill-beams comprising end sills, B B, and a pair of double inner sills, C C, as shown.

From the inner pair of base-beams, A A, extend perpendicular posts D—four at each side—and on the sills B C, outside the posts D, are placed platforms E E, extending longitudinally. The posts D support longitudinal top beams, F F, on which are laid four transverse sleepers, G, that carry at their outer ends longitudinal brace-beams H H, and on the sleepers G, inside the beams H H, is built the floor I of the lint-room J, a sliding trap-door, K, being arranged in the center of this floor over the press-box. The sides L L of the lint-room, which are preferably formed by the gable-roof, as herein shown, are secured to the

beams H H, and in one of the ends M M of the lint-room is provided an opening, N, to accommodate the exit-flue of the gin, adjoining which latter the press is preferably built.

At each end of the press the posts D are connected by transverse horizontal braces O, while the inner posts, D, are connected by double cross-braces P, corresponding to the double sills C. Between these braces O and P at each end of the press are secured longitudinally-disposed guide-tracks Q Q, corresponding guides, R R, being secured between the sills B and C, so that a rectangular guide-box is formed for the sliding block S, through which the feed-screw T turns and by which it is guided. The head U of the feed-screw is formed with notches V, that are arranged to be engaged by a pawl, W, on the block S, to retain the feed-screw in position from reverse movement. The head U is also formed with a circumferential shoulder, X, against which a disk, Y, having a serrated or notched periphery, Z, is secured, the disk being prevented from turning by nibs or projections A<sup>2</sup>, that enter grooves B<sup>2</sup> in the head U, while the securing-pins C<sup>2</sup> are driven in these grooves and against the said projections. The inner end, D<sup>2</sup>, of the feed-screw T is screw-threaded, and works through a screw-threaded perforation, E<sup>2</sup>, in a vertically-disposed post, F<sup>2</sup>, that comprises independent half-sections G<sup>2</sup> G<sup>2</sup>. These sections are arranged in slots H<sup>2</sup> and I<sup>2</sup>, respectively, in the double sills C C and the double braces P P, and are secured from vertical displacement by cross-pins J<sup>2</sup>, passed through perforations K<sup>2</sup> in the said sections. The sections can be separated in the slots H<sup>2</sup> and I<sup>2</sup> sufficiently to permit the feed-screw to be drawn from its position between them when desired, and they are clamped closely together by wedges L<sup>2</sup>, driven into the slots, and secured to the sections G<sup>2</sup> by pins M<sup>2</sup>, as shown. The point of the inner end, D<sup>2</sup>, of the feed-screw is formed with a shoulder, N<sup>2</sup>, and with an annular groove, O<sup>2</sup>, and the follower P<sup>2</sup> is formed with a central perforation, Q<sup>2</sup>, by which it is adjusted over the end D<sup>2</sup> against the shoulder N<sup>2</sup>, and is secured on the said end by a cross-pin, R<sup>2</sup>, that engages the groove O<sup>2</sup>, by which construction the screw can turn and drive the follower without occasioning any revolution of



the latter in the press-box. By removing the pin  $R^2$  the follower can be readily slipped off the feed-screw.

A lever,  $S^2$ , is provided for operating the feed-screw. The lever is formed with a kerf,  $T^2$ , in its under edge, by which it may be rested over the periphery of the disk  $Y$  to form its fulcrum, and it is provided with a pivoted hook-plate or pawl,  $U^2$ , that engages the serrations  $Z$  on the disk  $Y$  to turn the screw and force the follower into the press-box, the screw being retained from reverse movement by the pawl  $W$ , on block  $S$ . The lever  $S^2$  may be retained in position by a pin,  $V^2$ , engaging its end, and placed in any one of a radial series of perforations or holes,  $w^2$ , in the head of the feed-screw.

The inner beams,  $A A$ , are provided between the inner posts,  $D D$ , with transverse grooves  $X^2$ , in which are rested the end supports,  $Y^2$ , of the press-box. On the said supports is placed the bottom  $Z^2$  of the press-box, and from the side edges of this bottom project hooks  $A^3$ . The vertical sides  $B^3 B^3$  of the box are also rested on the supports  $Y^2$ , and the top piece,  $C^3$ , is placed on the sides. The portions of the press-box are retained in relative position by rods  $D^3$ , that are engaged in the hooks  $A^3$ , and have hook-shaped top ends,  $E^3$ , that are engaged by top cross-rods,  $F^3$ .

The operation and advantages of my invention will be readily understood and appreciated. It is simple and convenient, and is easy of operation.

I claim as my invention—

1. The combination of the horizontal parallel base-beams  $A$ , the transverse sill-beams rested on the latter, the vertical posts  $D$ , extending from the beams  $A$ , the longitudinal top beams,  $F$ , supported by the posts  $D$ , the sleepers  $G$ , the lint-room built on the said sleepers, the press-box centrally located on beams  $A A$  between the inner sills, and compressing mechanism arranged between the posts  $D$  at each side the press-box and working into the ends of the latter, substantially as and for the purpose set forth.

2. The combination of the frame of the press, a centrally-located press-box, the longitudinally-disposed guide-tracks  $Q R$ , the post  $F^2$ ,

having screw-threaded perforation  $E^2$ , the sliding block  $S$ , operating within the said track, the feed-screw working through this block and having the screw-threaded inner end, the follower working in the press-box, and means for operating the feed-screw, substantially as and for the purpose set forth.

3. The combination of the frame comprising the cross-sills and the vertical posts  $D$ , the transverse braces  $O$  and  $P$ , the longitudinally-disposed guide-tracks  $Q R$ , the slots  $H^2$  and  $I^2$ , the post  $F^2$ , vertically disposed in these slots and having the screw-threaded perforation  $E^2$ , the block  $S$ , sliding in the said track and carrying the pawl, the feed-screw working in the block and having the notches  $V$ , and formed with the screw-threaded inner end, the follower secured on this screw-threaded end, and means for operating the feed-screw, substantially as and for the purpose set forth.

4. The combination, with the sills  $C C$ , having the slot  $H^2$ , the cross-braces  $P P$ , having the slot  $I^2$ , the post  $F^2$ , comprising the independent half sections  $G^2$ , and having the screw-threaded perforation  $E^2$  and the perforations  $K^2$ , the pins  $J^2$ , and the wedges  $L^2$ , of the feed-screw, having the screw-threaded end that works through the perforations  $E^2$ , and carrying the follower, substantially as and for the purpose set forth.

5. The combination, with the feed-screw having the shoulder  $X$ , and the grooves  $B^2$  in the head, the serrated disk  $Y$ , having projections  $A^2$ , and the securing-pins  $C^2$ , of the operating-lever  $S^2$ , having the kerf  $T^2$ , and the hook-plate or pawl  $U^3$ , substantially as and for the purpose set forth.

6. The combination of the base-beams  $A A$ , having the grooves  $X^2$ , the end supports,  $Y^2$ , rested in these grooves, the sides  $B^3$ , the top piece,  $C^3$ , and the rods  $D^3$  and  $F^3$ , substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

RANSOM DAVID THOMPSON.

Witnesses:

T. N. MOLDIN,  
ELIJAH BEATY.