

No. 712,338.

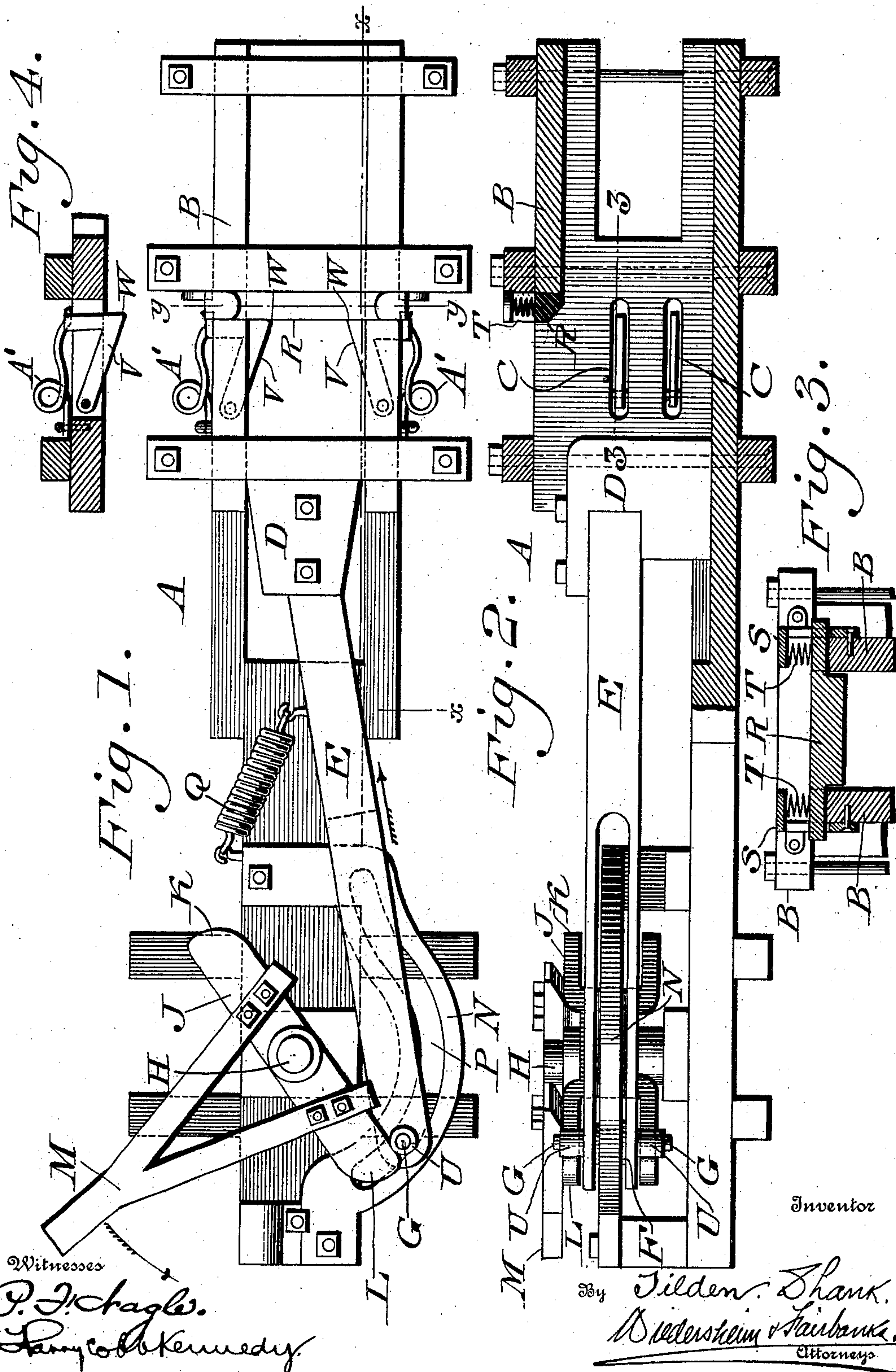
Patented Oct. 28, 1902.

T. SHANK.

HAY PRESS.

(Application filed Mar. 7, 1902.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

TILDEN SHANK, OF GLASS, ALABAMA.

HAY-PRESS.

SPECIFICATION forming part of Letters Patent No. 712,338, dated October 28, 1902.

Application filed March 7, 1902. Serial No. 97,075. (No model.)

To all whom it may concern:

Be it known that I, TILDEN SHANK, a citizen of the United States, residing at Glass, State of Alabama, have invented a new and
5 useful Improvement in Hay-Presses, of which the following is a specification.

My invention consists of an improvement in hay-presses of a suitable body portion with a plunger moving therein and guides for said
10 plunger and means for operating the same.

Figure 1 represents a plan view of a hay-press embodying my invention. Fig. 2 represents a partial side elevation and a partial sectional view on line *x x*, Fig. 1. Fig. 3 represents a partial sectional view on line *y y*,
15 Fig. 1. Fig. 4 represents a sectional view on line *z z*, Fig. 2.

Similar letters of reference indicate corresponding parts in the figures.

20 Referring to the drawings, A designates a hay-press having a box or frame which is of unusual construction and has the usual central opening therethrough in which is mounted and guided a plunger-head D, to which is
25 pivotally attached a plunger-arm E, which latter is bifurcated at one end and has mounted therein a wheel F, which is journaled on a pin G, the ends of which project and on which are mounted the rollers U. Pivoted
30 at H to a suitable portion of the frame is a crank-arm J, which is provided with bifurcated ends K and L, which are adapted to engage with the rollers U on the pin G when said crank-arm is properly turned, the latter
35 having a crank M thereon for manipulation thereof.

N designates a cam or quadrant which has the slot P therein in which the wheel F is adapted to travel and is guided thereby.

40 Q designates a spring which is suitably attached to the plunger-arm E and to the frame of the machine, said spring being adapted to return the parts to their normal position after operation.

45 R designates a bar which is mounted on the frame of the machine and which is suitably guided in slots in the ears S, secured to the frame B, a spring T being adapted to return the said bar to its normal position after it has
50 been moved therefrom.

In the sides of the frame B are the slots or

openings C, in which are the elbow-arms V, which have the shoulders W, which project into the interior of the frame B, said arms being connected with suitable springs A',
55 which are adapted to hold the same normally in position, as shown in Fig. 4.

The operation is as follows: The hay or other material is placed within the casing and the crank M operated to turn the crank-arm
60 J until one end—forexample, L—contacts with the rollers U on the pin G, when the said crank-arm is moved in the direction indicated by the arrow. The plunger-arm E is forced in the direction indicated by the arrow, being
65 guided by reason of the roller F moving in the slot P, which is in the quadrant N. This operates the plunger-head D to press the hay, and the spring Q returns the plunger head and arm to their normal position, when
70 the crank M is operated in the opposite direction, it being seen that when the hay is being pressed by the plunger D it will force out the springs V through the opening C; but after the pressure on the arm V ceases the
75 springs A' will force in the arms V to the position seen in Fig. 4, and the shoulder W will prevent the hay from springing back.

It will be evident that various changes may be made by those skilled in the art which will
80 come within the scope of my invention, and I do not, therefore, desire to be limited in every instance to the exact construction as herein shown and described.

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

1. In a press, a body portion, a plunger-head, a plunger pivotally connected therewith and bifurcated at its outer end, a roller carried in
90 said bifurcated end, a fixed quadrant embraced by said bifurcation and having a cam-slot in which said roller travels and a bifurcated crank-arm embracing the plunger and engaging means independent of said roller
95 carried by the latter to actuate the same.

2. In a press, the combination of a body portion, a plunger-head movable therein, a plunger pivotally connected with said head and bifurcated at its free end, a roller mounted in
100 said bifurcation, rollers upon opposite sides of the same; a quadrant with a cam-slot and

a crank-arm having bifurcated ends to embrace the plunger and quadrant and to engage said outer rollers.

5 3. In a press, the combination of a body portion, a plunger-head movable therein, a plunger pivotally connected with said head and bifurcated at its free end, a roller mounted in said bifurcation, rollers upon opposite sides of the same, a quadrant with a cam-slot and

a crank-arm having bifurcated ends to embrace the plunger and quadrant and to engage said outer rollers, and means for returning the plunger and head to their normal position.

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