

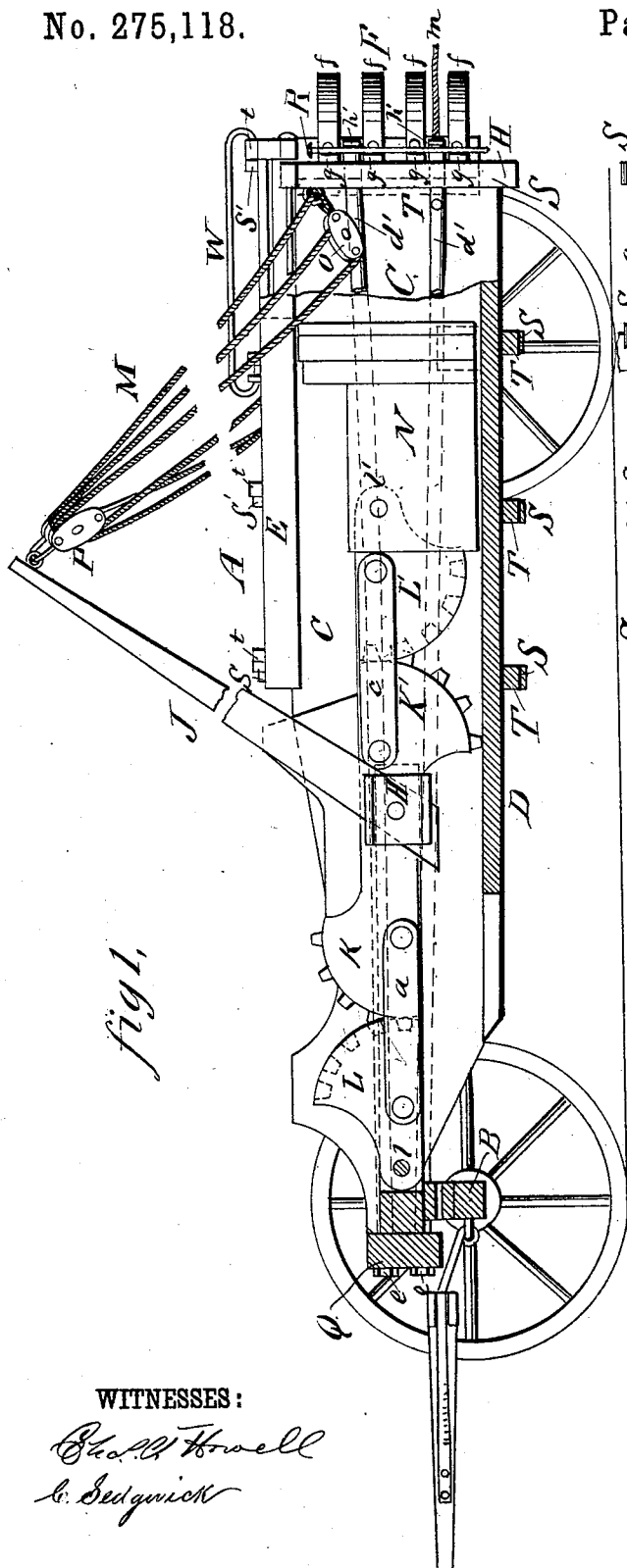
(No Model.)

E. J. BENNETT.

BALING PRESS.

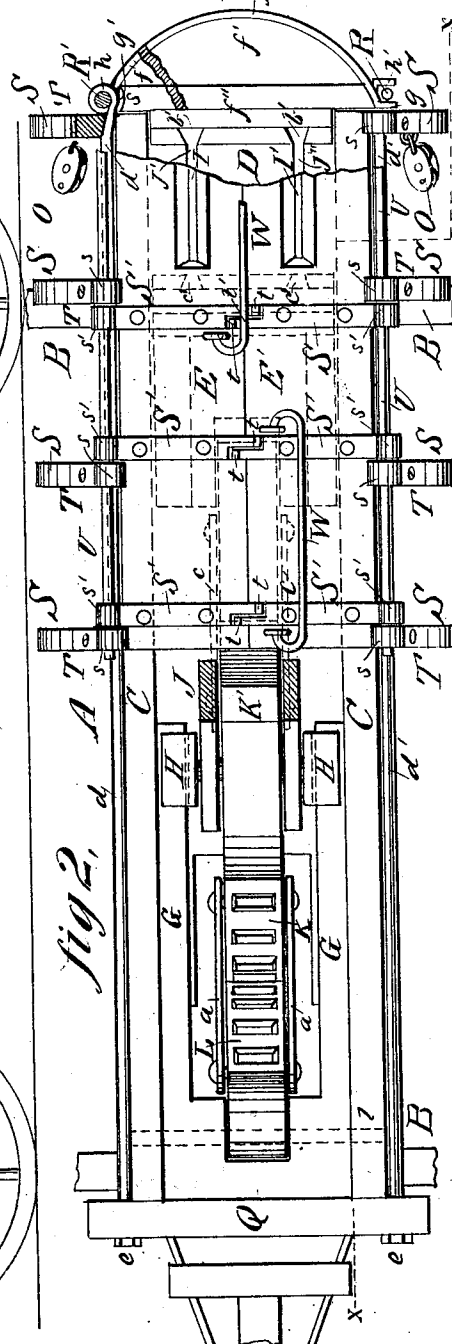
No. 275,118.

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WITNESSES:

Charles Howell
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INVENTOR:

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UNITED STATES PATENT OFFICE.

ELI J. BENNETT, OF BAINBRIDGE, NEW YORK, ASSIGNOR OF ONE-HALF TO
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BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 275,118, dated April 3, 1883.

Application filed October 14, 1882. (No model.)

To all whom it may concern:

Be it known that I, ELI JAY BENNETT, of Bainbridge, in the county of Chenango and State of New York, have invented a new and useful Improvement in Baling-Presses, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional side elevation of my new and improved baling-press, taken on the line *xx* of Fig. 2; and Fig. 2 is a broken plan view of the body of the press, the power-lever being shown in section.

The invention will first be described in connection with the drawings and then pointed out in the claims.

The press-box A is supported upon the axles B B of a suitable truck or carriage in the ordinary manner, and is composed of the side pieces, C C, partial bottom D, upper lids, E E', and end-gate F.

Upon the inside of the side pieces, C C, are formed or secured the bars G G, which form ways, upon which the fulcrum-plates H H of the main power lever J are adapted to move.

To the lower end of the main power-lever J, upon opposite sides thereof, are rigidly secured the segmental racks K K'. The rack K is yoked by the plates *a a* to the segmental rack L, which is pivoted to the forward end of the frame of the press upon the rod *l*, while the rack K' is yoked, by means of the plates *c c*, to the segmental rack L', which is pivoted to the rear end of the follower N upon the pin *l'*. These racks being connected to the main lever on opposite sides of its fulcrum, and the fulcrum of the lever being movable, they all move in opposite arcs of circles when the lever is reciprocated, and act together for withdrawing the follower from and forcing it forward into the press-box. The lever J is drawn forward in the ordinary manner by a team of horses attached to the end *m* of the rope M, which rope passes through the pulleys O O, attached to the sides of the press-box, and the pulley P, attached to the upper end of the lever, so that the lever and follower will be drawn and forced forward with great force for com-

pressing the material to be baled placed in the press-box. The material in the press-box, while being subjected to this heavy pressure in front of the follower, exerts in turn a great pressure upon the walls of the press-box in all directions—that is, rearwardly, horizontally, and vertically. The rearward pressure is taken by the end gate, F, which is held thereto by the sets of iron rods *d d* and *d' d'*, which form a part of the hinge and lock of the gate, as hereinafter described, and extend to the forward end of the frame of the press outside of the side pieces, C C, and pass through the heavy cross-piece Q, where they are provided with the nuts *e e* for straining them up and holding them against rearward movement. The horizontal and vertical pressure in the box is sustained largely by the strengthening iron bands S S and connecting-plates S' S', which form a part of the hinges and locks of the lids E E', and when the lids are locked encircle the press-box, as will be understood from Fig. 2, and as will be hereinafter more fully described.

The rear gate, F, is strengthened and supported upon the outside by the horizontally-placed curved iron bands *f f* and sector-shaped boards *f' f'*, placed between them and the main boards *f''* of the gate, as shown in Fig. 2, and the outer ends of these iron bands *f* are each formed with the straight portion *g*, which, together with the hooks *h' h'*, formed on the rear ends of the rods *d' d'* and the removable rod R, constitute the complete lock of the gate, and the opposite or inner ends of the bands *f f* are rolled to form the eyes *g' g'*, which, together with the eyes *h h*, formed on the rear ends of the iron rods *d d*, and the hinge-pin R', constitute the complete hinge of the gate.

The bands S S, four in number, are, as above mentioned, circular in form. They constitute about three-quarters of a complete circle, and when put in place around the press-box the quadrantal spaces left between them and the side pieces, C C, and the bottom D are filled by the sector-shaped boards T T, which are similar to the boards *f'* of the rear gate, F. In this manner the bands S S have a continuous bearing upon the side pieces, C C, and bottom D, and thus support and strengthen them from edge to edge.

The connecting-plates S' S', also four in

number, have the lids E E' bolted to them, and their outer ends are rolled to form eyes s' s' and the ends of the bands S S are rolled to form the eyes s s, and these eyes s and s', together with the rods U U, which pass through them, constitute the hinges of the said lids, and the plates S' S' also serve, in connection with the rods U U, to connect the ends of the circular bands S when the lids are locked, as will be understood from Fig. 2, and the inner or adjacent ends of the plates S S are formed with the hooks t t, which, when the lids are closed, lap past each other, as shown in Fig. 2, and these hooks, together with the bails W W, hinged to the outside of the lids E E', constitute the locks for the lids, the bails W W being adapted to drop down between the hooks t t of the plates S' S', as shown at t', Fig. 2. When the lids E E' are thus locked by the bails W W it will be seen that the bands S S and plates S' S' completely encircle the press-box, and thus strengthen the box and sustain it against the pressure inside at every point, like so many complete iron hoops. The bails W W also serve as means for opening the lids E E' for filling the press-box and removing the completed bale.

I I' and J' J'' are slots made respectively through the lids E E' and the bottom board, D, through which the bale tie, cord, or wire is to be passed for tying the bale after it is formed, and b' b' and c' c' are open vertical passages formed respectively in the inner faces of the rear gate, F, and follower N, corresponding with the slots I I' and J' J'' for the passage of the bale tie, rope, or wire from slot to slot and around the bale for tying it in the ordinary manner, as will be understood from Fig. 2.

Constructed in this manner the press is very powerful, and is light, strong, and durable, and is convenient and easy to operate.

Instead of using the removable rod R to fasten the end gate, F, I may use a bail similar to the bails W of the cover, hinging such

bail to the rear brace, T, to swing within and out of the parts g h' for locking and unlocking the end gate, as will readily be understood.

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

1. In a baling-press, the bars G G, secured to the side pieces of the frame of the press, in combination with the lever J, fulcrum-plates H H, and segmental racks K K' and L L', substantially as set forth.

2. The press-box A, strengthened at its sides and bottom by means of the circular iron bands S S, and the sector-shaped boards T T, placed between the bands and its sides and bottom, as set forth.

3. The combination, with the circular bands S S and rods U U, of the connecting-plates S' S', attached to the said rods and lids, and adapted to be locked together when the lids E E' are closed, substantially as and for the purposes set forth.

4. The combination, with the circular bands S S, sector-shaped boards T T, and rods U U, of the connecting-plates S' S', attached to the said rods and lids, and adapted to be locked together when the lids E E' are closed, substantially as and for the purpose set forth.

5. The rear gate, F, strengthened by means of the sector-shaped boards f' and curved iron bands f, the bands being made straight, as shown at g, and rolled to form the eyes g', substantially as and for the purposes set forth.

6. The rods d d, formed with the eyes h h, and the rods d' d', formed with the hooks h' h', in combination with iron bands f' and rods R R', the bands being formed with the eyes g' and straight portions g, substantially as and for the purposes set forth.

ELI JAY BENNETT.

Witnesses:

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