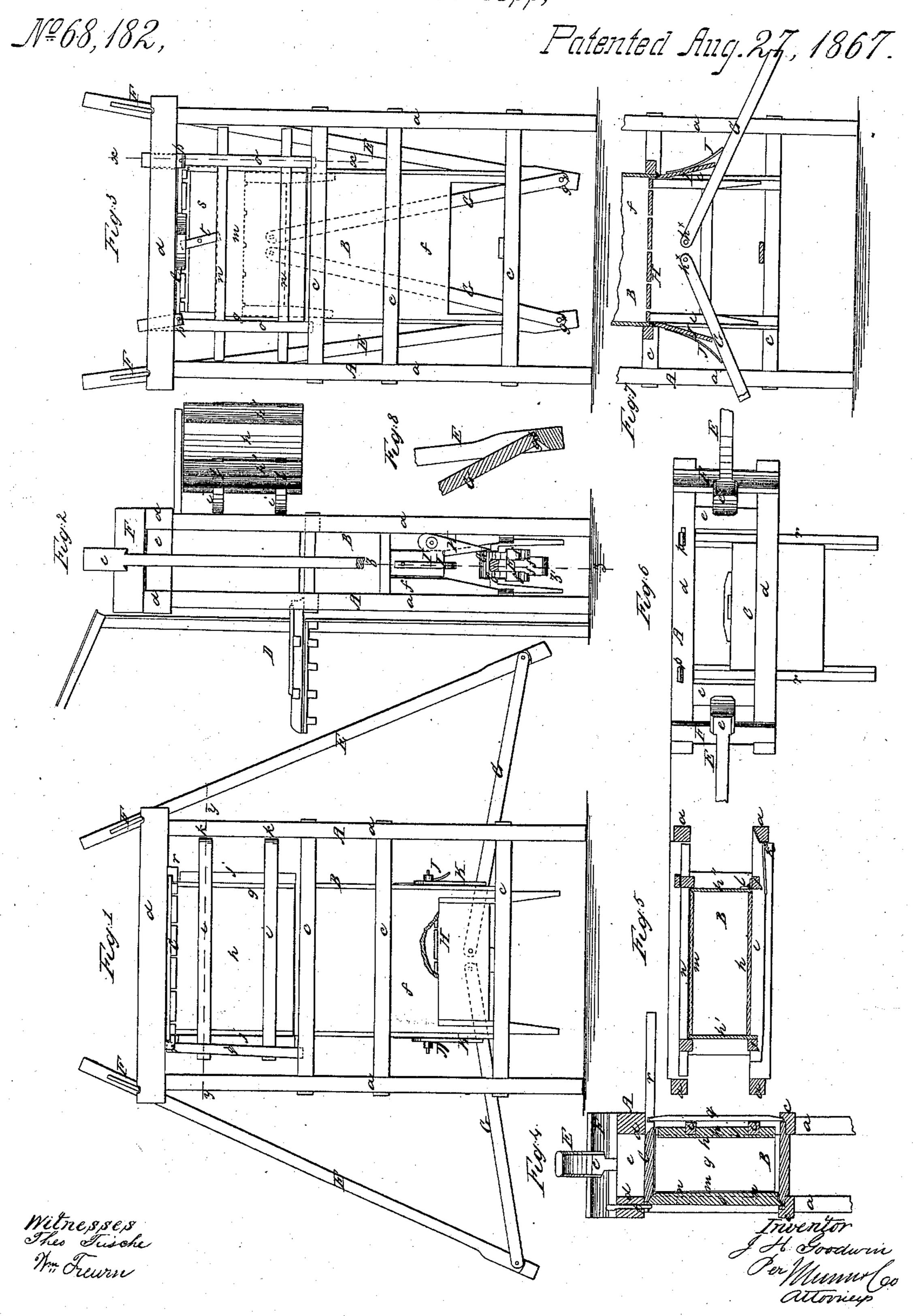
J. H. Gollmin, Lotton Press,



Anited States Patent Pffice.

J. H. GODWIN, OF SCOTLAND NECK, NORTH CAROLINA.

Letters Patent No. 68,182, dated August 27, 1867.

IMPROVEMENT IN BALING-PRESS.

The Schedule referred to in these Aetters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. H. Godwin, of Scotland Neck, in the county of Halifax, and State of North Carolina, have invented a new and improved Baling-Press; and that the following description, taken in connection with the accompanying drawings hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

This invention relates to a new and improved press for compressing articles or substances into a small compass for baling.

The invention consists in a novel construction and arrangement of the parts composing the press, as hereinafter fully shown and described, whereby several advantages are obtained, as hereinafter set forth.

My improved press is of that class in which levers on the toggle principle are employed. In the accompanying sheet of drawings—

Figure 1 is a side view of my invention.

Figure 2, an end view of the same.

Figure 3, a side view of the same, opposite to that shown in fig. 1.

Figure 4, a vertical section of a portion of the same, taken in the line x x, fig. 3.

Figure 5, a horizontal section of the same, taken in the line y y, fig. 1.

Figure 6, a plan or top view of the same.

Figure 7, a vertical section of a portion of the same, taken in the line z z, fig. 2, and

Figure 8 a section of a joint of two of the levers of the same, taken in the line z' z', fig. 2.

Similar letters of reference indicate corresponding parts.

A represents an upright framing, composed of four uprights a braced by horizontal bars c at their central and lower parts, the upper ends of a being framed into heavy plate pieces dd, connected by heavy transverse bars e, shown clearly in fig. 6. B represents the press-box fitted in the framing A, and having its lower part f fixed or stationary, while its upper part g has all its sides movable, forming doors which may be opened, so as to expose the whole upper surface or top of the lower part f. Three of these sides or doors h h' h'' are connected together, the side h being secured to two parallel horizontal bars ii connected by upright bars jj, the bars ii being attached at one end by hinges k k to one of the uprights a of the framing; the upper hinge K being provided or arranged with a screw and nut, K×, for the purpose of obviating the sagging or dragging of the doors, said contingency being obviated by screwing up nut K^{\times} whenever necessary. The end or side h' is permanently attached to one end of h at right angles, while the opposite end h'' is attached to the bar j at the other end of h by hinges l, as shown clearly in fig. 5. The side or door m which is opposite to h, when the upper part g of the press-box is all closed, is attached to the parallel bars n n connected by upright cross-bars o o, the lower ends of the bars o fitting in notches in an uppermost bar, c, of the framing, and the upper ends of o secured by drop-catches p. The three sides or doors h h' h'' are secured in a closed state by an upright bar, g, the lower end of which is fitted in a notch or mortise in an uppermost bar, c, of the framing, and the upper end fitted in a notch in one of two guide-bars rr, between which the head-block C works. The side or door m does not extend the whole height of the upper part g of the press-box, a space being allowed for a supplemental door, s, which is secured in place by a button, t, said button also securing the head-block C in position, (see fig. 3,) and preventing it from being drawn out, so that pilferers cannot enter the lint-room through the press-box when the press is not in operation. This will be understood by referring to fig. 2, in which it will be seen that the press is placed in contact with the side of the lint-room D, so that the press-box may be filled directly therefrom. This saves a great deal of labor now expended in conveying cotton from the lint-room to the press, and the invention is more especially designed for pressing cotton, and it will be seen that it is necessary to lock the head-block, as otherwise pilferers could readily enter the lint-room. E E represent two levers, through the upper ends of which cross-heads F pass, one through each. These cross-heads F rest or bear upon the plate pieces d d, and may simply rest in grooves therein, or connected by joints thereto. The upper parts of the levers E, through which the cross-heads F pass, are made thicker or heavier than the main portions, as shown clearly at e in figs. 2, 4,

and 6, in order to afford a requisite degree or strength. The levers E extend down, one at each side of the framing A, and to their lower ends levers G are attached, one to each. The levers G are connected to the levers E by joints formed with shoulders f, the latter-being on both levers, as shown clearly in fig. 2, which serve as bearings, and relieve the pins g^{\times} of the joints of undue strain. The lower ends or parts of the levers E E are, like the upper ends, made heavier than the main portions, in order to insure strength. The levers G require to be thicker or heavier than E, as they are, during the operation of pressing, subjected to a greater lateral strain, the levers E E being subjected principally to a longitudinal pull. The inner ends of the levers G are connected by joints h^{\times} to the platen H; said levers passing through openings i in the lower parts of the sides of the press-box, which openings are provided with drop-doors I, shown in figs. 1, 2, and 7. Each drop-door has a spring, J, attached to its outer side, said springs extending down a trifle beyond the lower edges of the doors, and curved slightly outward at their lower ends, as shown in figs. 1 and 7. These dropdoors are secured in a closed state, when the platen H is down, by means of buttons K, which, by their own gravity, catch over the edges of the doors when the platen reaches its lowest point of descent, as will be fully understood by referring to fig. 2. These buttons are moved or actuated by the levers G as the latter are raised, and said levers, as they rise, first strike the springs I and raise the drop-doors a trifle before the levers touch them. This will be fully understood by referring to fig. 7. The press-box is filled when the platen H is at the bottom of the press-box, an operator within the latter pressing it down. The door m at the upper part of the press-box is removed, and when the lower part of the press-box is filled the door h is closed or adjusted in position and the upper part filled through the supplemental door s. The door s is then adjusted in position and secured by the button t. The lower ends of the levers E E are then, by means of a suitable windlass, pulleys, and rope or chain attachment, drawn towards each other, and the platen H forced upward above the level of the top of the lower part of the press-box and flooring of the lint-room. The doors at the upper part of the press-box may then be thrown open, the bale bound with the greatest facility, and the head-block then shoved back and the bale removed. The drop-doors I admit of a low press-box being used, other presses of this class requiring the press-box to be sufficiently high to admit of the levers G passing directly up into the bottom of the press-box.

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

1. The levers E G connected with shoulders f and platen H, in combination with the drop-doors I, springs J, and buttons K, substantially as described for the purpose specified.

2. The sides h h' h'' hung to one post, and door m, in combination with the bar g, cross-bars o o, drop-catches h, bars n n, guide-bars r r, hinged bars i i, and head-block C, substantially as described for the purpose specified.

3. The screw-nut, in combination with the upper hinge to prevent the dragging of the doors, as herein set forth.

4. The combination of the head-block C, supplemental door s, and button t, substantially as described for the purpose specified.

5. The combination and arrangement of the frame A, having stout plates b, levers E G connected by shoulders f, doors h h' h'' and m, and supplemental doors s, catches h, cross-bars o o, bars n n c, button t, head-block C, drop-doors I, springs J, and buttons K, bar g, guide-bars r r, and hinged bars i i, substantially as described for the purpose specified.

J. H. GODWIN.

Witnesses:

J. H. LAWRENCE,

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W. H. SHIELDS.