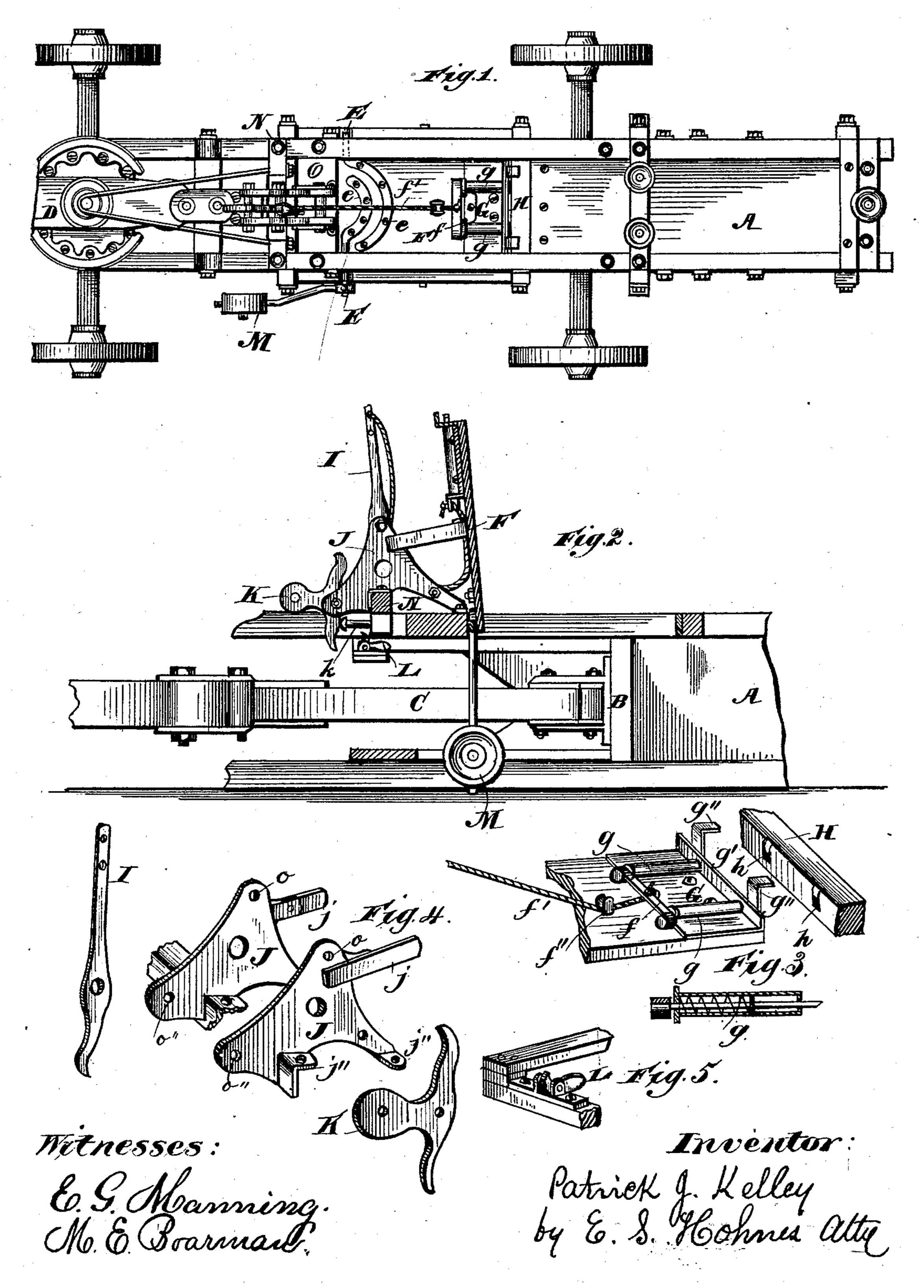
P. J. KELLEY.

CONTINUOUS BALING PRESS.

No. 282,089.

Patented July 31, 1883.



UNITED STATES PATENT OFFICE.

PATRICK J. KELLEY, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE WHITMAN AGRICULTURAL COMPANY, OF SAME PLACE.

CONTINUOUS BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 282,089, dated July 31, 1883.

Application filed June 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, Patrick J. Kelley, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Continuous Baling-Presses, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in the continuous or perpetual baling-press patented to Gustavus F. Whitman, March 27, 1883, No. 274,871; and it consists of certain changes in the construction of some of the parts, which will hereinafter be fully described

15 and specifically claimed.

In the drawings, Figure 1 is a top plan view of the press referred to with my improvements applied thereto. Fig. 2 is a side elevation of the front of the press with a portion broken 20 away. Fig. 3 is a detailed perspective view of a portion of the door and its spring-catches. Fig. 4 is a perspective view of the brackets and levers for operating the door. Fig. 5 is a broken perspective view of the tripper attached to the top portion of the traverser.

The general construction of the press is the same as in the patent above referred to.

A is the press-box, which is preferably mounted on wheels, so as to be portable; but 30 my improvements are equally applicable to stationary presses.

B is the traverser, C the toggle arm or lever, and D the sweep; but as all of these parts are similar to like parts in the patent referred to, and mounted on the frame or box in substantially the same manner, they need not be specifically described, as they form no part of my present invention. The same is true of the automatic retainers which are used to prevent the material which is to be baled from following the retrograde movement of the traverser.

My improvements relate to novel means for automatically opening the door of the press. The door F is hinged or pivoted to the top portion of the frame-work, as at E E, by means of segmental hinges or points e e, which are made with round pintles at their ends, and flattened segmental extensions, which are nearly the width of the door and secured to the top thereof. By making these points of this

form I am enabled to bring both of the pintles on the same transverse line, and the segmental extensions which extend across the door add greatly to its strength and prevent its splitting. At the other end of the door, and on the 55 top thereof, I secure a flange-plate, G, carrying the mechanism for locking the door in a closed position, as plainly shown in Fig. 3. This plate carries two spring-bolts, g g, which engage with suitable catches, h h, in a cross 60 beam or bar, H, on the top of the press-box.

The plate G has an upwardly-projecting flange, g', through which the bolts g g pass, and is also provided with two angle-pieces, g'' g'', the upper arms of which lie upon the 65 top of the beam H when the door is closed. The two bolts are connected at their front ends by a cross-bar, f, and at or near the center of this cross-bar I attach a suitable cord or chain, f', for operating the bolts. This cord is passed 70 under a sheave or pulley, f'', secured to the door in front of the bolts, and the other end of the cord or chain is secured to a pivoted upright lever, as will be hereinafter explained.

It is evident that more than two bolts may 75 be used, if desired, and in some instances one broad flat bolt might be sufficient; but I pre-

fer the construction just described.

In front of the point at which the door is hinged or pivoted, and to the beam N on 80 top of the press-frame, I secure two substantially triangular brackets, J J. (See Fig. 4.) These brackets are provided with lugs j'' j'', the front ones of each bracket embracing the corner of the beam or brace N, and the rear 85 ones secured or bolted to a brace, O, immediately in front of the door. The brackets are thus held in a vertical position, and are provided with suitable transverse stays or bolts. An upright lever, with holes in its top or long-90 est arm, in which the cord or chain f' is secured, is pivoted between these brackets by means of the holes O" O" and a rod or pintle at the top, and the bell-crank lever K, Fig. 4, is pivoted in like manner at the lower front 95 ends of the brackets. One arm of this lever K extends upwardly and rests against the lower rounded end of the short arm of the lever I, while the other end extends downwardly, and is limited in its movement toward 100 the door by means of the stud or pin K. Stops or arms jj are also attached to the top of the brackets to prevent the door from being thrown

too far open.

On the top of the top portion of the sliding frame to which the traverser is attached, between suitable lugs, I provide a weighted pawl or tripper, L, as plainly shown in Fig. 5. A weighted lever, M, is attached to one or both sides of the door, either by extending one of the pintles for the purpose, or such levers may be attached in any other known manner.

The operation of my invention is as follows: In Fig. 1 the traverser is shown in its most ad-15 vanced position, and the toggle-lever and the mechanism which connects it with the sweep are in a straight line; but when power is applied to bring the sweep around, the traverser begins its retrograde movement, and when the 20 tripper L reaches the lower end of the bellcrank lever K it trips it. The upper arm of this lever is thus pressed against the short arm of the upright lever I, throwing its long arm forward, thus drawing on the cord and releas-25 ing the spring bolts or catches. As soon as the bolts are released the door is thrown open against the stops on the brackets by means of the long-armed lever and weighted lever, and a charge of the material to be baled is then 30 fed into the pressure-chamber. The door is then closed by hand, the catches or bolts engaging automatically and holding the door shut while the material is being pressed and until the traverser begins its retrograde move-35 ment.

The pawl or tripper L is so constructed that while it trips the bell-crank lever during the backward movement of the traverser it does not touch it in its forward movement.

Having thus fully described my invention, 40 what I claim, and desire to secure by Letters Patent, is—

1. In a continuous baling-press, a door provided with suitable locking-bolts, which are adapted to be released by means of a cord or 45 chain, an upright lever, and a bell-crank lever pivoted to brackets on the top of the press, said lever being actuated by a tripper on the traverser when the sweep is operated, substantially as set forth.

2. A continuous baling-press having a door provided with locking-bolts, which are adapted to be automatically released by the operation of the traverser and sweep, in combination with a weighted lever or levers for throwing the 55

door open, substantially as set forth.

3. In a continuous baling-press, the traverser provided with a tripper or weighted pawl, L, adapted to operate a series of pivoted levers, and a cord or chain for releasing the locking- 60 bolts on the door as the traverser is moved forward, substantially as set forth.

4. The combination, in a continuous balingpress, of brackets attached to the top of the frame, and stops secured to said brackets, to 65 prevent the door from being thrown too far

open, substantially as described.

5. In a continuous baling-press, a door pivoted by means of segmental hinges extending across the same, and having their pintles extended and carrying the weighted levers for throwing the door open, as set forth.

PATRICK J. KELLEY.

In presence of— HENRY L. WHITMAN, GEORGE E. BENNETT.