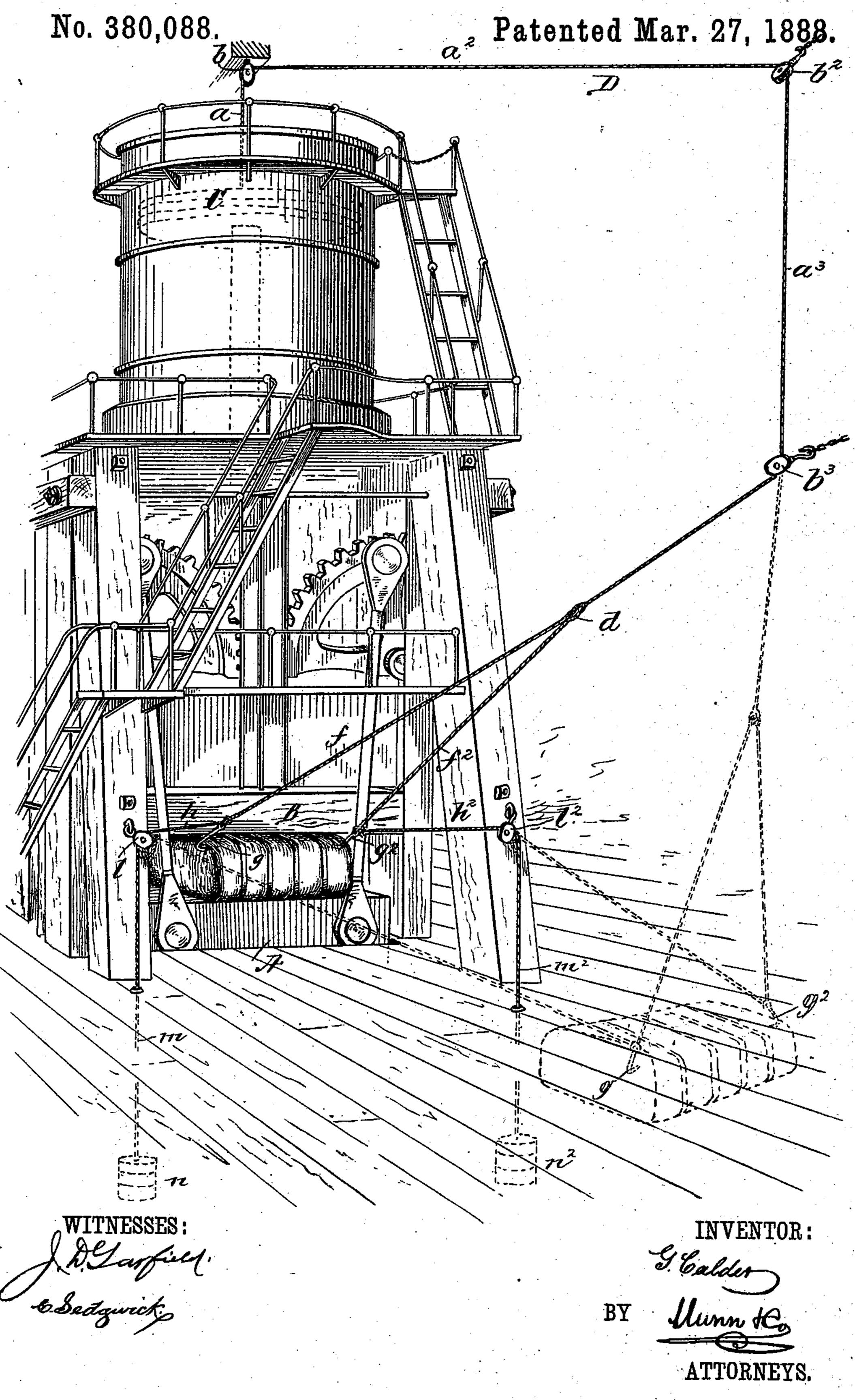
G. CALDER.
BALE EJECTING ATTACHMENT FOR PRESSES.



United States Patent Office.

GEORGE CALDER, OF VICKSBURG, MISSISSIPPI.

BALE-EJECTING ATTACHMENT FOR PRESSES.

SPECIFICATION forming part of Letters Patent No. 380,088, dated March 27, 1888,

Application filed November 22, 1887. Serial No. 255,862. (No model.)

To all whom it may concern:

Be it known that I, George Calder, of Vicksburg, in the county of Warren and State of Mississippi, have invented a new and Improved Bale-Ejecting Attachment for Presses, of which the following is a full, clear, and exact description.

The object of the present invention is to provide means in relation to a baling-press which will at a proper time in the operation of said press be actuated by a movable part thereof for a withdrawal of the compressed bale; and it consists in the combination of parts with and their arrangement in relation to a baling-press, all substantially as will hereinafter more fully appear, and be set forth in the claims.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure is a perspective view at one side of a cotton-baling compress, and illustrating the bale-ejecting contrivance of this invention as applied in operative relation thereto.

In the compress shown, to be operated by any 25 suitable motive power, a platen, A, rises toward and falls from a stationary head-block, B, in conjunction with a piston, C. To the moving piston I attach a wire rope, chain, or other equivalent or suitable connection, D, which, 30 through blocks or rollers, as $b b^2 b^3$, or other guiding means, is extended in vertical, horizontal, and returning vertical dispositions, as at a $a^2 a^3$, its outer end portion being provided with an eye, d, from which two ropes or chains, ff^2 , 35 extend, which are provided at their outerends with suitable bale-engaging hooks, g g^2 , and the arrangement of the connections D $f f^2$ is such that when the piston is in the position it should occupy before its throw for securing 40 a movement of the platen toward the headblock the hooked ends of the connections ff^2 extend or may be extended to the bale, and at or near said hooks are attached flexible connections, as wire ropes h h^2 , extending there-45 from in more or less horizontal lines to fixed guides or blocks $l l^2$, and thence downwardly, as shown at $m m^2$, and provided with weights n n², said weighted connections, if desired, being suitably housed in properly-disposed 50 boxes. A bale having been placed in the com-

then securing an upward movement of the platen, is thereby compressed, and before the piston returns downwardly to withdraw the platen the hooks g g^2 are to be forced into the bale. 55 Then on the downward plunge of the piston the line of connection D, secured thereto, is by its piston-end portion a carried downwardly, its returned end a being drawn upwardly, drawing the spreading hooked lines ff^2 with the en- 60 gaged bale outwardly and upwardly from the press, and at that time drawing up the weighted lines h h^2 , the distance of such withdrawal of the bale from the compress being regulated by the arrangement and adjustment of the blocks 6 or guides for the line D, and of the length of such line. The hooks, then being removed from the discharged bale by the weighted line connections h h^2 , are, as the piston again ascends, drawn back into proximity with the 70 newly-imposed bale for their engagement therewith.

It is not intended to limit the use of the present bale-ejecting attachment to any particular form of baling-press, and it is plain 75 that it may be applied to a press in which the compressing part or parts move in other direction or directions than described for the platen A, and that the spreading connections ff^2 may be drawn upon by a line D otherwise guided 80 than as particularly shown, and which may also, if desired, be connected to some other movable part of the press than the piston.

By providing an attachment substantially as described the working capacity of the com- 85 press is materially increased and a considerable saving of time and labor effected.

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

1. The combination, with a baling-press, of a rope connected to the piston thereof, and provided with a bale-engaging device on its free end, guide-pulleys over which the rope passes, and ropes attached to the above-men- 95 tioned rope passed over pulleys on the press-frame and provided with weights on their ends, substantially as herein shown and described.

n n², said weighted connections, if desired, be- | 2. The combination, with a reciprocating ing suitably housed in properly disposed | piston of a cotton or other baling press, of a 100 boxes. A bale having been placed in the compress, on an upward movement of the piston, | vided at its other end with branching ropes f

 f^2 , having hooks gg^2 , weighted ropes hh^2 , attached to said ropes ff^2 , and pulley blocks or rollers for guiding said ropes Dhh^2 , when all adjusted for a withdrawal of a bale from the press on the movement of its parts to release the bale from pressure, and for a disposition of said hooked ropes hh^2 near the compressing

portions of the press when disengaged from a bale, all substantially as and for the purpose described.

GEORGE CALDER.

Witnesses:

D. J. McRaven, Chas. F. Boschert.