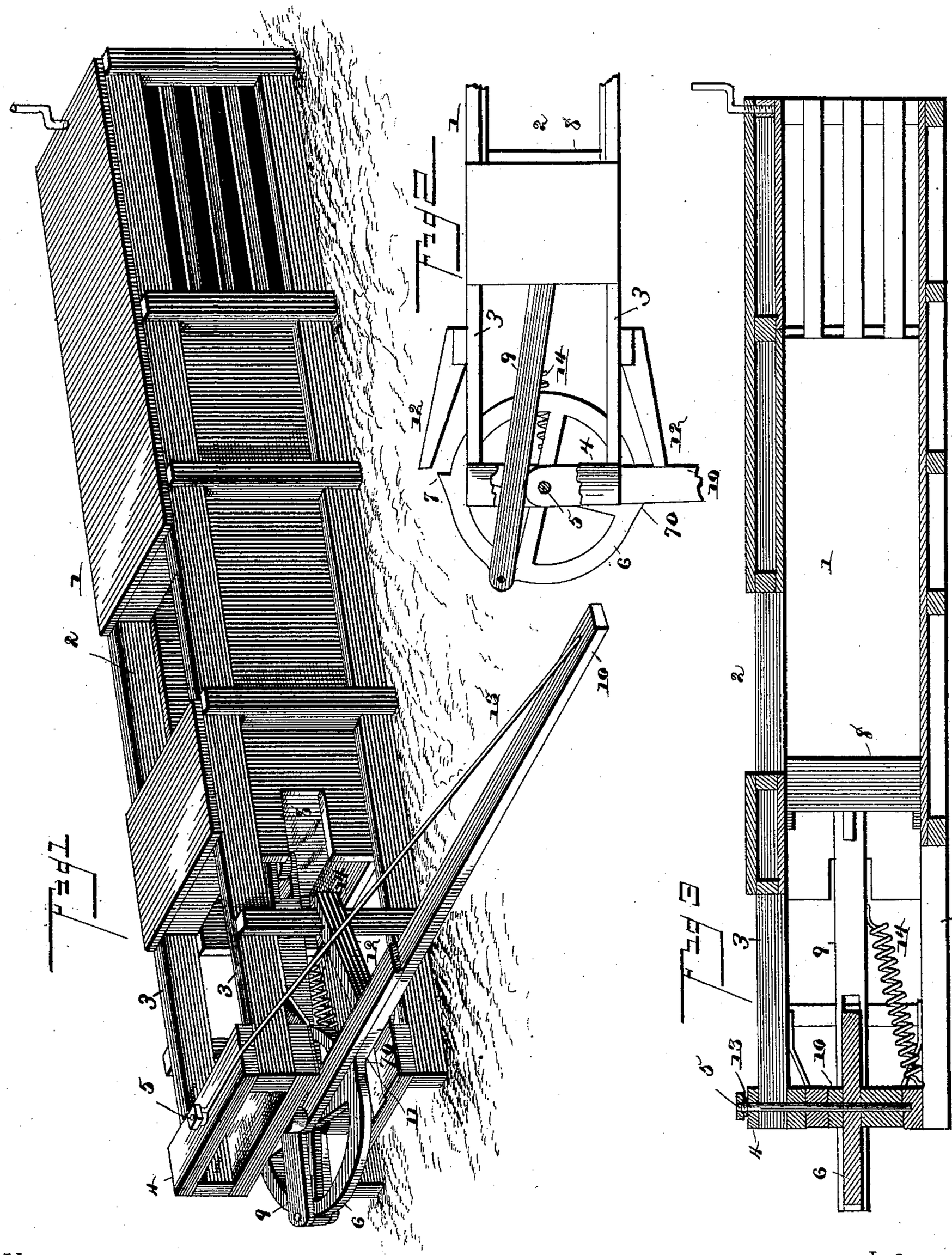
(No Model.)

W. H. ADAMS.

HAY PRESS.

No. 424,161. Patented Mar. 25, 1890.



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UNITED STATES PATENT OFFICE.

WILLIAM HENRY ADAMS, OF HACKETT, ARKANSAS.

HAY-PRESS.

SPECIFICATION forming part of Letters Patent No. 424,161, dated March 25, 1890.

Application filed September 17, 1889. Serial No. 324,187. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY ADAMS, a citizen of the United States, residing at Hackett, in the county of Sebastian and State of Arkansas, have invented a new and useful Hay-Press, of which the following is a specification.

This invention relates to that class of baling-presses which are provided with reciprocating plungers and in which the rebound of the plunger is effected by means of a retracting-spring; and it has for its object to provide an improved operating mechanism for this class of presses which shall possess superior advantages in point of simplicity, durability, and general efficiency.

With these ends in view the invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, Figure 1 is a perspective view of a baling-press equipped with my improvements. Fig. 2 is a plan view of one end of the same, with parts broken away for the purpose of showing the construction more clearly. Fig. 3 is a longitudinal sectional view of the press.

Like numerals of reference indicate like parts in all the figures.

1 designates the press-box, which is of ordinary construction, and which is provided with the feed-opening 2 and with the rearwardly-extending arms 3, which are composed of the rear ends of the frame-beams, and which are provided at their rear ends with cross-pieces 4, through which extends the vertical shaft 5. Suitably journaled upon the latter is a horizontal wheel 6, which is provided on diametrically-opposite sides with cam-shaped lugs or projections 7 and 70.

8 designates the reciprocating plunger, which is arranged in the usual manner in the press-box, and to the rear side of which is pivotally connected the pitman 9, the rear end of which is bifurcated and straddles the horizontal wheel or disk 6, to the periphery of which it is pivotally connected at a point centrally between and in rear of the cam-shaped projections 7 and 70.

10 designates the operating-lever, which is mounted pivotally upon the shaft 5 above the wheel 6, and is provided with a shoulder 11 to engage the projections 7 and 70 of the said wheel. Brackets 12 are suitably attached to the rear ends of the frame, from which they extend in a rearward direction to limit the movement of the sweep or operating-lever. A brace-rod 13 connects the latter with the upper end of the vertical shaft 5. A spring 14, connecting the pitman 9 with one of the rear cross-pieces of the frame, serves to retract the plunger.

The operation of this invention will be readily understood from the foregoing description, taken in connection, with the drawings hereto annexed. Draft is applied to the outer end of the sweep or operating-lever, the shoulder of which engages one of the projections 7 of the wheel 6, to which a half-revolution is imparted, thus forcing the plunger in a forward direction in the press-box. When the pitman 9 passes the dead-center, it is retracted by the action of the spring 14, which nearly completes the revolution of the wheel 6 and brings the projection 70 of the latter into contact with the shoulder of the operating-lever. The latter is then moved in an opposite direction, thus repeating the operation. The arms or brackets 12 are so arranged as to gage the extent of the movement of the operating-lever, which should be sufficient to enable the pitman 9 to pass the dead-center at each repetition of the operation, thus bringing the retracting-spring into play.

This device, it will be seen, is exceedingly simple in construction, and it may be operated in a very rapid and effective manner.

Having thus described my invention, I claim and desire to secure by Letter Patent of the United States—

The combination of the reciprocating plunger, the horizontal wheel provided on diametrically-opposite sides with cam-shaped projections, a bifurcated pitman connecting

the said wheel with the reciprocating plunger, the operating-lever mounted upon the axis of said wheel and having a shoulder to engage the cam-shaped projections of the latter, a retracting-spring, and the brackets extending rearwardly from the frame of the press-box to limit the movement of the sweep or operating-lever, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM HENRY ADAMS.

Witnesses:
B. F. GRANDY,
R. S. BRIDGMAN.