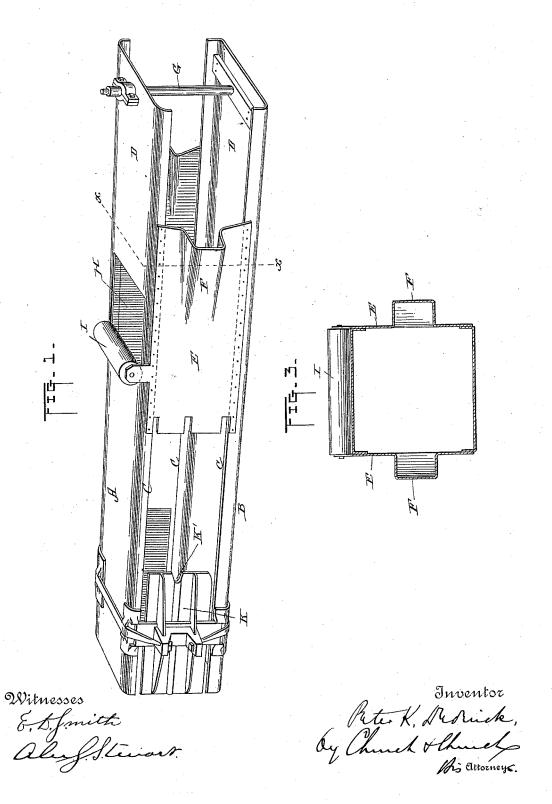
P. K. DEDERICK. BALING PRESS.

No. 419,646.

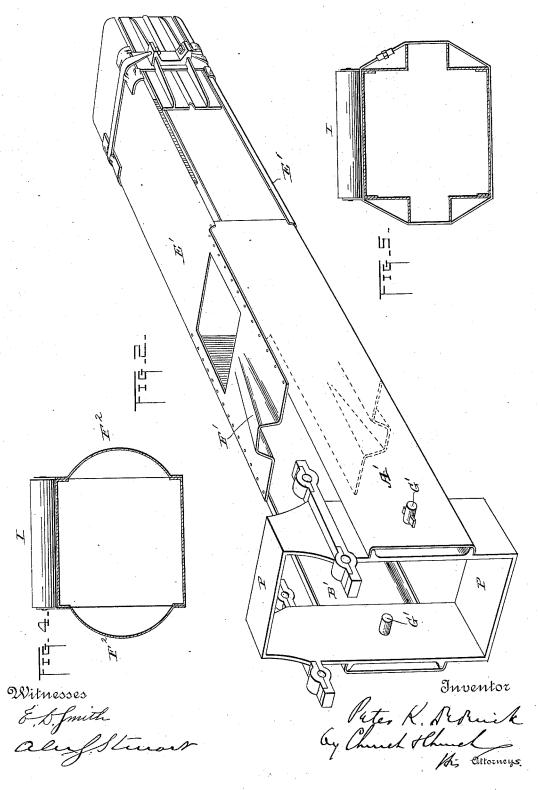
Patented Jan. 21, 1890.



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UNITED STATES PATENT OFFICE.

PETER K. DEDERICK, OF LOUDONVILLE, NEW YORK.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 419,646, dated January 21, 1890. Application filed February 9, 1889. Serial No. 299,227. (No model.)

To all whom it may concern:

Be it known that I, PETER K. DEDERICK, of Loudonville, in the county of Albany and State of New York, have invented certain new 5 and useful Improvements in Baling-Presses; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, 10 and to the letters of reference marked thereon.

My improvements relate to that class of presses for which Letters Patent were granted to me October 29, 1872, Nos. 132,566 and 132,639, and the various modifications of the 152,055, and the various meaning of the same, for which Letters Patent have since been granted to me, particularly No. 269,566, December 26, 1882, and No. 152,084, June 16, 1874, and in this instance relate to the construction of the box or case, to one end of 20 which the pressing-power is fulcrumed and within which the pressing operation is per-

Heretofore such baling-cases have been constructed chiefly of wood, bolted together 25 and set up in sections or parts, whereas I now construct a plate steel or iron tube flanged or bent at the edges or corners in order to secure the greatest strength and rigidity with the least amount of metal.

In the accompanying drawings, Figure 1 is a perspective view of a press constructed in accordance with my invention and adapted to a horizontally-operating power, as shown in Patent No. 269,566, referred to. Fig. 2 is a 35 perspective view of a press having a power device vibrated perpendicularly, as in Patent No. 152,084, referred to, showing the application of my invention thereto. Fig. 3 is a sectional view taken on the line x x, Fig. 1; and 40 Figs. 4 and 5 views of a modification of the press-sides.

Similar letters of reference in the several figures indicate the same parts.

In Fig. 1, A represents the top of the case 45 or tube, and B the bottom, both of which are flanged at each edge, as at C C C C, thereby forming a top and bottom to the bale-chamber stiff enough to resist the outwardly-expansive force of the pressed material passing through 50 it as well as forming a guide for the same, and also stiffening the projecting ends D D, so as to form a suitable connection and sup- scribed herein.

port to the power of the press, secured at or near their extremity, as shown. This flanged top and bottom also renders the presstube stiff enough to be mounted and operated on axles supporting each extremity only. These flanged top and bottom plates are connected together by and firmly secured to the side plates E, thus forming a rigid tube or 60 case. The said sides E are arched—that is, either forged or built out, as shown at F in Figs. 1 and 3, or at F2 in Fig. 4; or they may be slotted and a heavy band arched outwardly over the slot, as shown in Fig. 5, so as to 65 form a connection between the top and bottom and allow play for the pitman within the arch, thus securing a firm connection between top A and bottom B much nearer the point of attachment of the power to the projecting 70 ends D D and correspondingly increasing their rigidity. By this construction I am enabled to so economize in the weight of metal as to secure the requisite strength and rigidity with less than two-thirds the weight as 75 compared with wood, and also actually making a saving in cost. The power in this instance is secured to the projecting ends D D by being secured on the shaft G, which passes through the top and bottom plates, as 80 shown, and is clamped or otherwise firmly secured by means of boxes or castings firmly secured to said top and bottom plates.

H is the feed-orifice through which the ma-

terial to be baled is fed.

I is a roller pivoted to firm projections from the case and under which roller the material overlapping the traverser is forced. The sides at the discharge end are closed by solid cast plates K, thus cheapening the cost of the 90 construction. They are grooved, as shown at K', to pass the bands used to bind the bales and secured and adjusted to produce more or less friction by bands connecting them around the press top and bottom, as shown, 95 so that the discharge end may be adjusted simultaneously on all four sides, if desired.

Partition-followers for passing the bands, retainers for retaining the pressed material, a hopperfor receiving the material, and other 100 well-known appliances common to this class of presses and described in the patents referred to may be applied to the press de-

Fig. 2 differs from Fig. 1 only in that the side plates of the press at the power end are flanged instead of the top and bottom plates, and the top and bottom arched to connect around the pitman instead of the sides, thus adapting it to a power having a pitman vibrating vertically.

A' B' are the flanged plates to which the power is secured; E', the top and bottom plates arched at F' to give room for the vi-

bration of the pitman or toggle.

G' are the power-pivots secured to the power end of the extended sides A' B', and on which the crank-wheels or other power devices are located, and the arched sides E' or the arches F' of the top may be continued up to and over the power in this case, if desired; or the power-plates secured to the sides may be connected around over the power, as shown at P. Any style of power device may be fulcrumed to the ends D D (shown in Fig. 1) with like results.

I claim as my invention-

1. In a baling-press, the longitudinal metal
25 plates having the power-fulerum secured to
one end thereof and provided with the inwardly-turned flanges to strengthen and
stiffen them, and also to produce additional
friction upon and guide the column of pressed
30 material as it is forced through the press, in
combination with the metal plates connecting said flanged plates, substantially as described.

2. In a baling-press, the combination, with the Iongitudinal metal plates having the 35 power-fulcrum secured to one end thereof and provided with the inwardly-turned flanges, as described, of the metal side plates bolted on or otherwise secured to the longitudinal flanged plates and arched, as at F, to accommodate the pitman, substantially as described.

3. In a baling-press, the combination, with the longitudinal metal plates having the power-fulcrum secured to one end thereof and provided with the inwardly-turned 45 flanges, of the metal side plates, and the castings and adjusting devices at the discharge

end, substantially as described.

4. The combination, with the longitudinal flanged top and bottom plates, of the side 50 plates riveted to said flanged plates and having the extensions or ears constituting the bearings for the roller, substantially as described.

5. In a baling-press of the character de- 55 scribed, the flanged plates for receiving and holding the power-fulcrum, in combination with said power-fulcrum and the plates which connect said flanged plates, substantially as described.

PETER K. DEDERICK.

Witnesses:
R. J. VAN SCHOONHOVEN,
CYRUS R. DEDERICK.