(No Model.)

P. K. DEDERICK.

BALING PRESS.

No. 457,636. Patented Aug. 11, 1891.

Fig. 3.

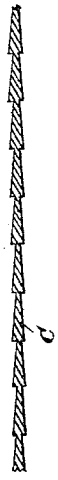


Fig. 4.

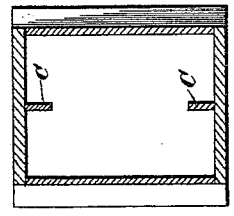


Fig. 1.

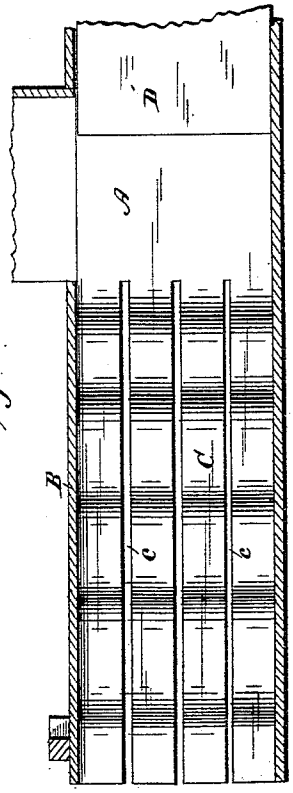


Fig. 2.

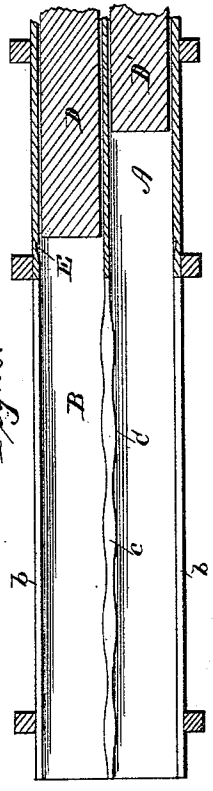
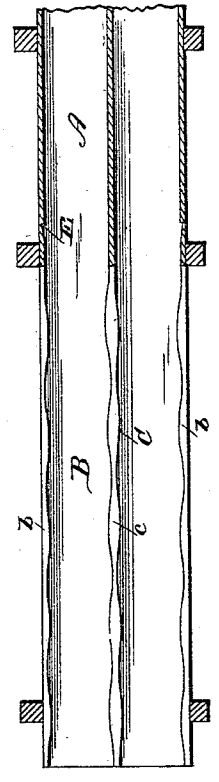


Fig. 5.



Witnesses.
Chas. R. Burr.
A. J. Stuart.

Inventor.
P. K. Dederick.
by Church & Church
his Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

PETER K. DEDERICK, OF LOUDONVILLE, NEW YORK.

BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 457,636, dated August 11, 1891.

Application filed August 14, 1886. Renewed June 6, 1891. Serial No. 395,289. (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 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, and to the letters of reference marked thereon.

This invention relates to that class of presses which are designed to produce large-sized bales formed of transverse sections or layers that are themselves composed of a series of smaller transverse sections or charges. In presses adapted to the formation of bales of this kind it is necessary that some means be provided for supporting centrally the column of pressed material as it is formed in the bale-chamber, in order to prevent it from bulging or expanding back on the retreat of the traversers which force the charges of material into the said bale-chamber. One form of press for making these bales is shown in another application filed by me on or about the 14th day of August, 1886, Serial No. 210,903, and consists, essentially, of a press-box, a bale-chamber, and two traversers operating within the press-box and serving alternately to force a charge of material from the press-box into the bale-chamber and support said charge and the column of pressed material in front of it until relieved of this duty by the other traverser, and so on during the formation of the column. Another form of press is shown in another application filed by me on the 30th day of March, 1886, Serial No. 197,179, embodying a divided or two-part press-box, two traversers, one for each compartment of the press-box, and a common bale-chamber, in which the charges of material forced in from each compartment of the press-box are compacted together. In this last-mentioned press the traversers are not relied upon to centrally support the pressed column, but that duty is performed by the end of the wall or partition which divides the press-box longitudinally into its two parts.

Now it is the object of my present invention to provide still another way of securing the requisite central support to the column of pressed material; and to this end it consists, primarily, in providing the press with a partition extending through the press-box as well as through or partly through the bale-chamber, and slotted in the bale-chamber, so as to permit of the passage of the binding-ties, whereby sufficient internal resistance is secured within the bale-chamber to prevent back expansion.

It further consists in corrugating or notching the sides of the said partition, so as to increase the friction on the pressed column; and it consists, finally, in certain novel combinations of parts, which will be hereinafter fully described, and pointed out in the claims at the end of this specification.

Referring to the accompanying drawings, Figure 1 represents a sectional elevation of a press-box and bale-chamber constructed in accordance with my present invention; Fig. 2, a horizontal sectional view of the same; Fig. 3, a detail view showing a notched instead of a corrugated partition. Fig. 4 represents a modified form of partition. Fig. 5 is a view showing the walls of the bale-chamber as well as the partition corrugated.

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

A indicates the press-box, and B the bale-chamber, of what is known as a "continuous" or "perpetual" baling-press. C is a partition which extends longitudinally through both the press-box and bale-chamber, and is slotted in the bale-chamber, as at *c*, opposite the slots *b* in the side walls of the latter for the purpose of permitting of the application of the tying-bands.

D D′ are two traversers working in the press-box on opposite sides of the partition C. These traversers are intended to be reciprocated by any well-known or suitable form of power contrivance and to be given either simultaneous or alternate movements, as preferred.

E are the usual retainers arranged at the entrance to the bale-chamber.

The operation of the press is as follows: Charges of hay or other material to be baled are fed into the feed opening or hopper of the press-box in front of the traversers, and

are by the latter forced into the bale-chamber past the retainers, where, by reason of the frictional resistance offered by the walls of the partition C, they are supported on the inner edges as effectually as upon their outer edges and are prevented from bulging back when the pressure of the traversers is removed. When a sufficient number of charges has been forced into the bale-chamber to form a bale, the column of pressed material is tied off, the ties being passed through the slots in the side walls of the press and in the partition in the usual manner. The tied bales are ejected through the end of the press by the forming-bale, as ordinarily. The frictional resistance of the partition is greatly increased by corrugating it, as shown in Fig. 2, or by notching it, as shown in Fig. 3, and for the baling of straw or other like materials I prefer that either one or the other of these forms of partitions be adopted; but for the baling ordinary hay a plain partition answers well.

It is not essential that the partition should extend from top to bottom of the press, as shown in Fig. 1, as comparatively narrow friction ribs or projections such as shown in Fig. 4 placed at top and bottom will answer. Nor is it essential that the partition, of whatever form, should extend entirely through the bale-chamber to the discharge end, as it may terminate short of said discharge end, it only being necessary that enough of the partition shall extend into the bale-chamber to give the desired central support.

Having thus described my invention, what I claim as new is—

1. In a baling-press, the combination, with a press-box and bale-chamber, of a partition extending through the press-box and into the bale-chamber and slotted to permit of the passage of the ties, and two traversers operating in the press-box on opposite sides of said partition, whereby the column of pressed material built up in the bale-chamber by the operation of the traversers is centrally supported by frictional contact with the partition and the ties are enabled to be applied to both parts of said column, so as to divide the column transversely into bales, substantially as described.

2. In a baling-press, the combination, with a press-box and bale-chamber, of a partition having uneven surfaces extending through the press-box and into the bale-chamber and slotted to permit the passage of the ties around both parts of the column of pressed material, and two traversers operating on opposite sides of said partition, substantially as described.

3. In a baling-press, the combination, with a press-box and bale-chamber, of a corrugated partition extending through both press-box and bale-chamber and slotted to permit the passage of the ties around both parts of the column of pressed material, and two traversers operating on opposite sides of said partition, substantially as described, and for the purpose specified.

PETER K. DEDERICK.

Witnesses:
W. A. SKINKLE,
CYRUS R. DEDERICK.