M. LAHAUSSOIS.

Hay and Cotton Press.

No. 202,835. Patented April 23, 1878.

Fig. 1

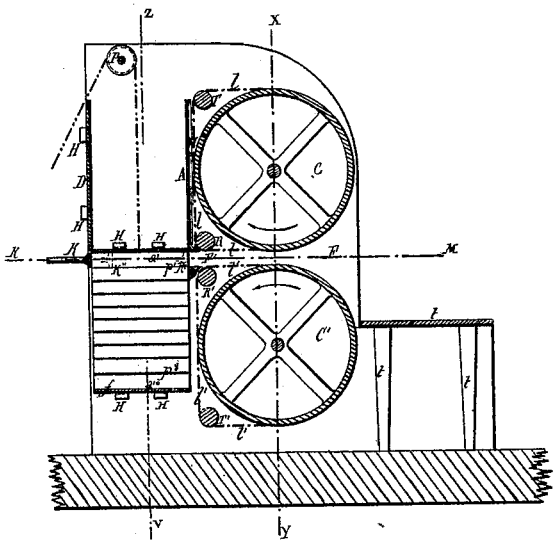


Fig. 2.

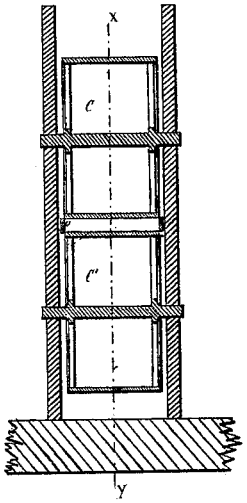


Fig. 4.

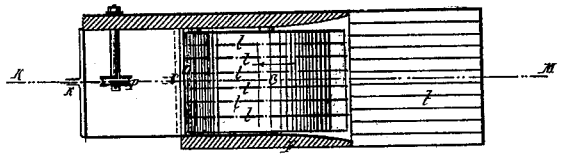
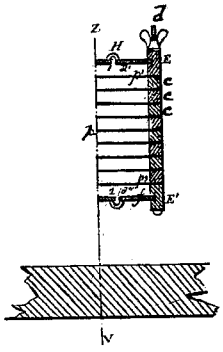


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

MAXIME LAHAUSSOIS, OF PARIS, FRANCE.

IMPROVEMENT IN HAY AND COTTON PRESSES.

Specification forming part of Letters Patent No. **202,835**, dated April 23, 1878; application filed November 22, 1877.

To all whom it may concern:

Be it known that I, MAXIME LAHAUSSOIS, of Paris, France, have invented a new Improvement in Hay and Cotton Press; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a longitudinal section; Fig. 2, a transverse section on line X Y; Fig. 3, a transverse section on line Z V; and in Fig. 4 a section on line K M.

This invention relates to an improvement in presses such as are used for pressing hay, cotton, and other substances.

In the presses, as hitherto constructed, the entire mass required for a single bale has been placed in the press and the whole mass compressed at one time. In such pressing the portion situated at the surface is much more compact and dense than that near the middle of the bale.

The object of this invention is to make the bale equally dense throughout; and it consists in pressing the material in successive layers, one after the other, and then combining the several layers into one bale, as more fully hereinafter described.

The pressing apparatus consists of a pair of strong cylinders, C C′, constructed with circumferential grooves, which serve as guides for metallic bands *l l′*, the bands on the cylinder C passing around rolls R and T, and those on cylinder C′ passing around the rolls R′ and T′. The rolls are arranged distant from each other according to the thickness of the layer required, and supported in suitable bearings, so that power may be applied thereto in any convenient manner. The bands *l l′* from their respective cylinders pass in a horizontal plane to their respective rolls R R′, the distance between the bands corresponding, therefore, to the distance between the rolls. *t* is the platform on which the material to be pressed is placed. The sides of the case which incloses the rolls are made flaring outward, as seen in Fig. 4, and so as to form a funnel-shaped mouth or entrance between the rolls. The material to be pressed is placed on the platform *t*, and directed between the revolving rolls. The mass will be compressed to a thickness corresponding to the distance between the rolls, and in length corresponding to the length of the rolls.

The collector, in which the successive compressed layers are to be introduced, consists of a case in which compartments are arranged to successively present themselves to receive successive compressed layers. The number of these compartments varies according to the number of layers required to form the bale. This case, or compartments, is formed by a series of sheet-iron plates, P′, resting at their ends on blocks *c*, with a top above and bottom below, all held together by bolts *d*, as seen in Fig. 3. These blocks form the sides of the compartments, and can be varied in thickness, according to the thickness of the layer to be introduced, as also may the area of the plates. This collector or series of compartments is arranged at the discharge, or at the point where the rolls R R′ deliver the layer, so that the plates lie in a horizontal plane, and so as to be moved upward or downward between the walls A and D and the two sides of the apparatus, thus forming an inclined space, within which the collector may be raised. A movable bar or plate, K, is successively introduced by the operator, or may be by mechanical means, into each compartment, as it comes before the delivery of the press, and so that the material passing from the press into such compartment will force the plate K outward, the plate K thus forming one side of the compartment. On the opposite side there may be a device to cut off the layer from the mass, so as to more clearly deliver the layer into the compartment, and form the other side of that compartment, then the plate K removed from that compartment and introduced to the next. The collector is raised into the inclosed space above by any suitable means, (here represented as a rope over the pulley P above,) until the next compartment is presented for the second layer, and so on, until all the compartments are filled. To bind the bale, the walls A and D, as well as the top and bottom of the collector, are made with grooves, substantially as in common baling-presses, through which the bands may be passed and the bale se

curely bound, the inclosed space within which the collector stands, when full, being constructed so as to be opened to remove the bound material, substantially as in other presses.

It will be observed that the collector is removed with the bale, then the nuts *d* and their bolts taken out, so that the blocks *c* may be removed, as also the division-plates and the top and bottom of the collector. The bale is then free, ready for market, the collector again put together to receive another succession of layers, to be in like manner delivered and bound.

I claim—

1. The method herein described of baling hay, cotton, &c., consisting in a succession of compressed layers delivered successively to a collector, and each layer held in its compressed condition until the requisite number of layers are delivered, then bound into one common bale, and substantially as specified.

2. In a baling-press, the combination of the two compressing-cylinders, the carrying and delivering bands around them, a collector composed of a series of compartments, arranged so as to be successively presented to the delivery to receive the material compressed by the rolls and hold the same until the compartments are successively filled, substantially as described.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

MAXIME LAHAUSSOIS.

Witnesses:

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ARMENGAUD, Jeune.