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Improved Baling Press.

The advantages which result from compressing bulky substances in a small compass are very great, for by this operation a great deal of space is economized, and more of the material may be stored within a limited area; for purposes of preparing hay, cotton or like substances for transportation, or even for the convenience of farmers or warehouse men, machines which accomplish this object are indispensable.

The press herewith illustrated is—it is claimed by the inventor—a most convenient and powerful one.

The operating machinery is all on the outside, leaving the interior of the press-box unobstructed; the press is small and compact in comparison with the size of the bale it will make, as it is ordinarily but eight feet high, can be loaded on any wagon by two men, and drawn by a single team of horses or oxen. It is also conveniently arranged as regards the door-fastenings, the attaching of strings to the bales, etc.; these features, together with the immense strain imparted by the levers, render this press a most desirable one. The following description will enable our readers to understand its construction and mode of operation:—

The machine has three doors—one on top and one on each side; one of them may be seen at A, and another at B, this is the opening where the material to be pressed is delivered to the press-box, C, which is merely a strong square structure of wood firmly bolted together. There is also a follower outside the box, which consists of a stout wooden or metallic partition on which the substance to be pressed rests; this follower is carried up by the chains and levers seen at the side in a manner which will be shown hereafter. There are also platforms, D and E, where the material is delivered and discharged, on the platform, D, there is a spring catch, F, which holds the door above in a favorable position for loading the press. On top of the upper door, B, there are two strong beams, G, which hold the top door down, and take the strain of the machinery below; these beams are themselves held down by the eccentric rollers, H, worked by the handles attached to them. The door, A, is kept closed by the curved bar, I, and the lever, J; when this bar is turned in the manner shown in the engraving, and the lever moved over it, there is a projection on the latter which keeps the bar in its place; there is a similar fastening on the opposite side.

The power to press the bale is given by the wheel,

L, the levers, M, and the spirally-grooved wheels, N: these latter are on the same shaft as the wheel, L. The levers are not attached to the brace, O, but work on a shaft, P, that passes under the front platform. The follower has a plate outside of the press-box to which the chain, Q, is fastened. This chain runs over the pulley, R, is taken by the ends of the levers, M, and from them proceeds to the spiral-grooved wheels, N. It is easy to see that when power is applied to the large wheel by attaching a horse or an ox to the rope, and turning it by driving the animal, the

so as to break the force of the shock. The inside of the press-box, at the top where the greatest compression takes place, is not square, but the sides incline towards each other; by this arrangement a square bale is produced, the inventor stating that it is not possible to make a square bale in a square box as the upper part is not as perfectly compressed as the lower; with a box constructed in the manner described the result is as set forth.

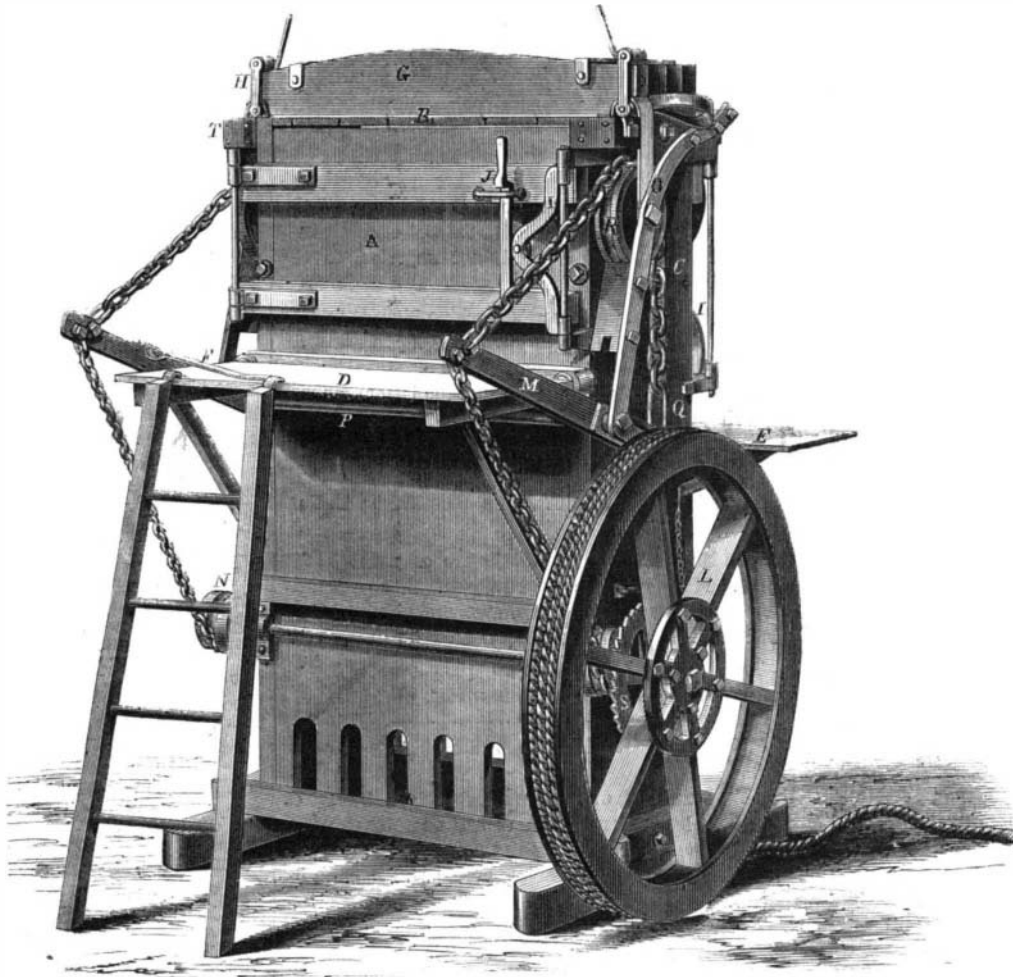
It is stated that these presses are rapidly superseding all others on the Pacific coast, on account of the advantages mentioned heretofore. A patent on this invention was granted, through the Scientific American Patent Agency on Sept. 1st, 1863, to Jacob Price, Jr., of Petaluma, Cal.; for further information address the inventor at that place.

Colt's Armory.

The loss of machinery by the burning of Colt's Armory is estimated at \$800,000. There were six miles of steam pipe in the building, and the scene presented by the ruins as they remain resembles the ancient cities unearthed by modern explorations; there are nothing except crumbling fragments where a splendid building so recently existed. The question is now asked—who fired the Armory? That the supposition of an emissary coming from the rebels to fire the building is not preposterous, is shown by the fact that not long ago a workman did come there with the piteous story that he was a deserter from the rebels, and he was employed. But when the fire broke out—it was during the only half-hour in the twenty-four when a watchman was not present;

there being an interval of half an hour in the morning between the going-away of the night watchman for that floor and the one below it, and the coming of the day watchman. It could not have been fired in the night, because then the watchmen were all about, and no one could have got into the building. It was kindled in the wing connecting the two main buildings, so that it was likely to take both and destroy the rifle as well as the pistol shops. It started where the patterns and much choice dry wood were stored, which would readily kindle. It is a great mystery how it could have caught fire itself, and no one but a rebel sympathizer could have desired its destruction.

THE Stark Mills, Manchester, N. H., are running about one-third of their machinery, consuming 100 bales of cotton per week.



PRICE'S BALING PRESS.

chains will draw down the lever and elevate the follower, thus pressing the substance inside. In the engraving the levers are shown in the act of pressing, for when the follower is down they stand vertically; it will be observed also that one of the chains is attached nearer to the center of the lever than the other; this prevents the lever from getting on the center, makes it start easier, and is a great advantage in other respects. The leverage also constantly increases as the rope is drawn out, for it will be seen that when the lever is vertical only a portion of its length is actually available, this is all that is required when the substance to be pressed is loose; as the mass becomes more compact the mechanical efficiency of the levers is increased. When the pressed bale is to be removed the pawl in the ratchet wheel, S, is withdrawn; the levers then fly up and are received by the check pieces, T, which are faced with leather,