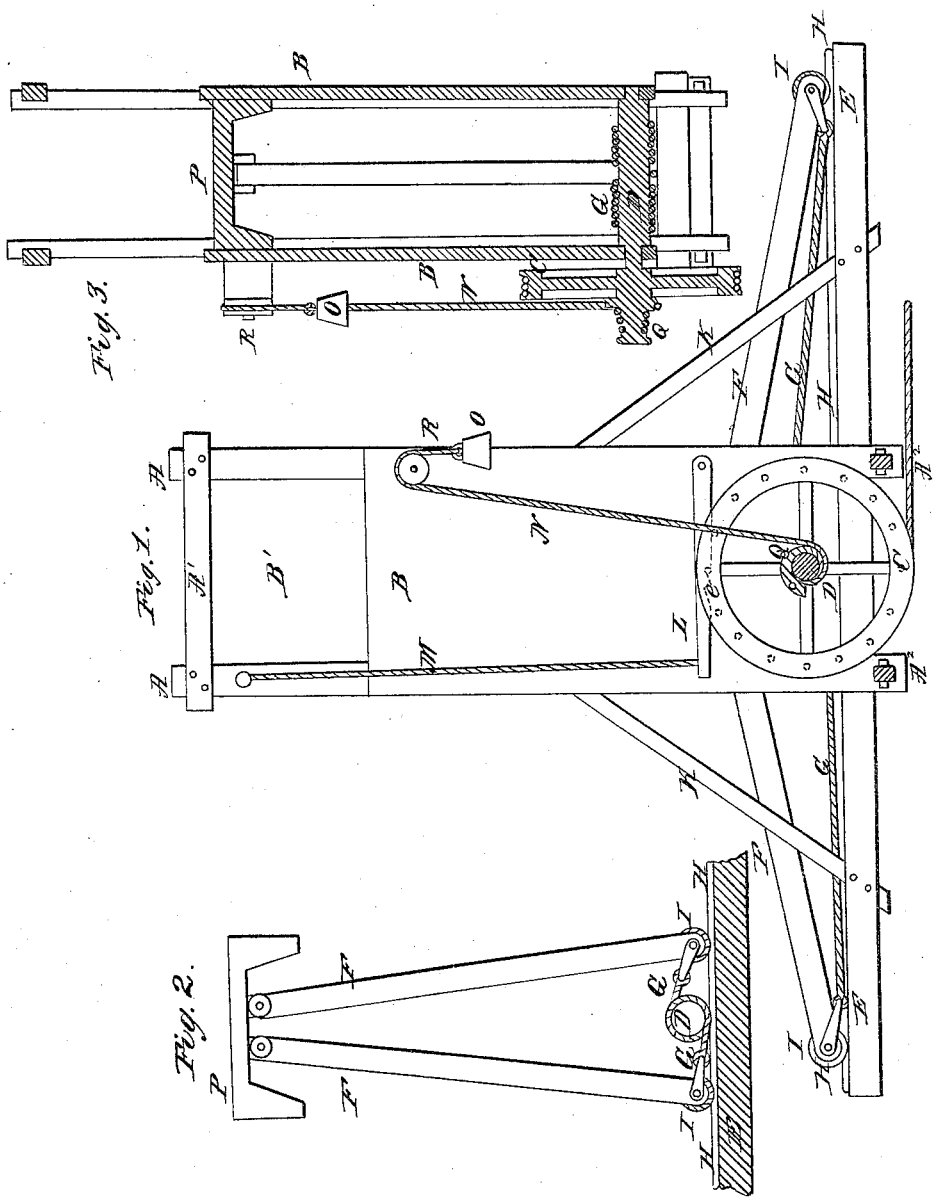
W. C. Van Hoesen,

Hay Press.

No. 2445. Patented Feb. 1, 1842.



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UNITED STATES PATENT OFFICE.

WM. C. VAN HOESEN, OF CATSKILL, NEW YORK.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. **2,445**, dated February 1, 1842.

To all whom it may concern:

Be it known that I, WILLIAM C. VAN HOESEN, of the town of Catskill, in the county of Greene and State of New York, have invented a new and useful Improvement in Presses for Pressing Cotton, Hay, and other Substances, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 represents a side elevation of the machine, the follower being down and the levers extended in a position preparatory to the commencement of the pressing. Fig. 2 is an elevation of the levers and follower, representing them in the position they would assume at the termination of the pressing. Fig. 3 is a vertical cross-section, showing the interior of the box, &c.

The frame A, containing the box B, in which the article to be pressed is placed, and the follower P, for pressing the article, is not very dissimilar to my patented hay-press, being oblong and standing in a vertical position, composed of four posts, A, united by suitable cross-pieces, A′ A², and braced by suitable braces, K, the planking forming the box being secured to the sides of said posts, the portion of which being secured by means of staples and bars or other suitable means, so that the sides can be removed for the admission of the substances to be pressed, and replaced during the operation of pressing, the spaces between the posts at the ends being left open to allow the levers F to rise and fall therein, in which spaces, at the bottom of the frame, is placed horizontally a long timber, E, projecting equally on either side of the frame, upon which is laid an iron rail, H, for two grooved wheels, I, to travel over, said wheels being let into grooves in the ends of the levers F. The follower P is made in the usual manner, and fits the inside of the box, so as to rise and fall therein. The two levers F are connected to the under side of the follower P at points about one-third its length from the ends thereof by suitable loose joints. The grooved rollers I, let into mortises in the outer ends of the levers F, turn on pins passed through the same, to the extremities of which pins are attached bridles, to which are attached cords G, leading to a windlass, D, placed at the center of the frame at the bottom thereof, the axle of which, passing from one side of the frame to the other, having on its outer extremities a large wheel, C, to which the power is applied for turning it, and a scroll or spiral hub, Q, around which a cord, N, is passed, leading over a pulley, R, turning on a pin inserted in the frame, to which a weight, *o*, is attached, for graduating or regulating the return or downward movement of the follower P. A stop-lever, L, turning on a pin inserted in the frame A, having a shoulder, *l*, on its under side, is arranged so that said shoulder shall rest against cogs or pins in the rim of the larger or propelling wheel for preventing the return of the same, said lever being raised from the wheel by a cord, M, attached to the frame, when the motion of the wheel is to be reversed and the follower is to be lowered.

The operation of this press is as follows: The cotton or hay or other substance is put into the box B through the space B′, the follower P being down or near the bottom of the box, as represented in Fig. 1. The space B′ being closed by boards, and secured, the large wheel C is turned by manual, horse, or other power in the direction of the arrow, which causes the ropes G, attached to the outer extremities of the levers F, to be wound on the axle D, drawing said outer extremities of the levers toward each other, (the grooved wheels I moving over the way H,) while the opposite extremities of the levers, attached to the follower, are caused to rise in the box, carrying upward the follower P and the substance to be pressed, which is pressed against the upper cross-piece, A′, of the frame, the pressure increasing gradually as said levers approach a vertical position, and when the grooved wheels I are next the axle D, as seen in Fig. 2, the maximum pressure will have been obtained. The boards are then removed, the bale tied and discharged. During the before-described operation of raising the follower, the weight O, also, was lowered by unwinding the cord N from the spiral grooved cone Q, and the pins of the wheel C slipped over the shoulder *l* of the top lever, L. The bale being removed, the lever L is raised by the cord M, and secured, the motion of the wheel C is reversed, the gravity of the follower causes it to descend, causing the levers to extend themselves, and again approach a horizontal position, the weight O ascending and regulating the descent of the follower. The

main wheel C may be turned by a crank by manual power or by a rope passing around its circumference, drawn out by manual or animal power.

What I claim as my invention, and which I desire to secure by Letters Patent, is—

The before-described mode of applying power (accumulative) to the purpose of pressing substances by means of the before-described combination of the wheel C, the shaft D, the ropes G, attached to the ends of the levers F, and the grooved wheels I, and the iron rails H, upon which the said grooved wheels travel, also the spiral or scroll at the end of the shaft D, in combination with the foregoing parts.

WM. C. VAN HOESEN.

Witnesses:

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