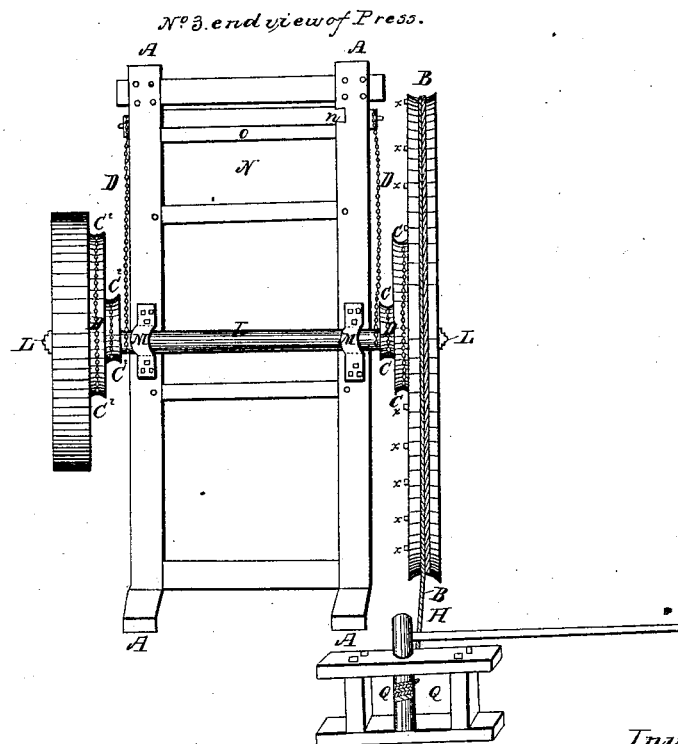
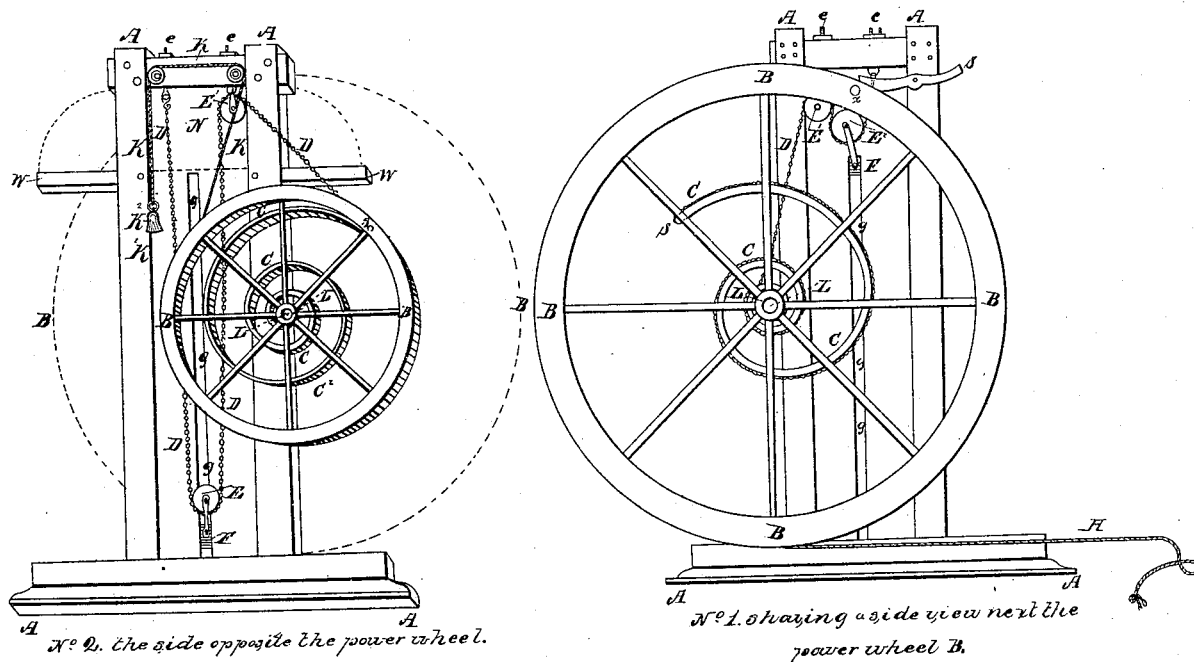


W. C. VAN HOESEN.

Cotton Press.

No. 2,026.

Patented April 2, 1841.



Witnesses:  
J. A. Hendry.  
J. W. Key.

Inventor:  
Wm C Van Hoesen.

# UNITED STATES PATENT OFFICE.

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

## IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. 2,026, dated April 2, 1841.

### *To all whom it may concern:*

Be it known that I, WILLIAM C. VAN HOESSEN, of Catskill, Greene county, and State of New York, have invented a new and Improved Construction of a Press for Pressing Hay, Straw, Cotton, or other Substances, and an Improvement in the Application of Power to the Same; and I do hereby declare that the following is a full and accurate description thereof.

The nature of my invention consists in the application of a new principle of power to presses, whereby the use of the screw is entirely done away with, and the work performed in a better, easier, and more speedy manner than by the presses now or heretofore in use.

In the use of the press hereby sought to be patented (there is, no doubt) three or four times the quantity of hay or other material may be compressed, in a better manner and at an almost incredible diminution of labor, in the same space of time, the horse being required to travel at each pressing less than one hundred feet, whereas by the former method he was obliged to perform a distance of some thousands of feet in a circle. The power is produced (in lieu or instead of a screw) by a large wheel, B, (circular,) to which a rope is attached, by means of which the power is applied through the agency of a horse, or, if necessary, by a capstan or windlass and lever. Upon the inside of this large wheel B is constructed a spiral or scroll wheel, *c*, grooved and extending from the shaft, which is the center of the scroll, toward the outer edge of the wheel B. A corresponding scroll-wheel, *c'*, is placed on the opposite side of the press, and grooved in like manner. In these grooves the chain D, which is attached to the outer edge of the scroll, (at S in drawings,) as soon as the power is applied begins to travel or wind up, decreasing the resistance to the power as the chain approximates to the center, until it at last revolves or winds upon the axle or shaft, at which time the follower is drawn up and the bale pressed. It will be seen that as more power is required as the material is in the progress of compression, it is by this improvement obtained by an increase of purchase as the chain recedes from the outer edge or circumference of the wheel

to which the power is applied. Your petitioner prays leave to refer to the drawings herewith filed in making his specification or description, which he desires to be considered a part thereof.

Plate No. 1, A A A A represent the framework inclosing the box N, into which the hay or other material is put, and does not materially vary in its construction from the box or trunk of an ordinary hay-press, excepting the opening or groove *g g g*, in which the end of the follower travels up and down. The letters B B B B represent the power-wheel, of a circular form, in the rim or edge of which is cut a groove or hollow, in which a rope passes, to which is attached a horse, at or near H, or passing round a windlass or capstan, as may be convenient, which rope is secured by one of its ends to the circumference of the wheel B in any convenient way. C C C show a spiral or scroll wheel fastened inside of the larger or power wheel B, in the edge of which is a groove in which the chain D D travels, approximating to the center or shaft as the follower is drawn up, lessening the resistance and of course creating a greater purchase by the power-wheel as the material becomes compressed and hardened and at the times when greater power is required. (The application of the chain and power-wheel to the scroll the undersigned considers as one of the most important advantages of his invention.) D D is a chain, one end of which is fastened to the outer edge or end of the scroll, as at S, passing through or over the pulley-block E' at the head of the press, thence down around and under the pulley-block E<sup>2</sup>, which is at the end of (and attached to) the follower, thence up to the head of the press, where it is fastened by hooks or bolts *e e*. Its operation in lifting the follower is described under the letters C C C. E' E<sup>2</sup> are the pulley-blocks above referred to, one attached to the head of the press and the other to the end of the follower. These are separate when the follower is down, and brought near together when the follower is drawn up by the chain D D. F shows the end of the follower. *g g g g* represent an opening or groove, up and down which the end of the follower passes. H shows the rope to which the horse or windlass power is attached.

Plate No. 2 shows the side of the press op-

posite the power-wheel, with the follower down ready for pressing. The letters A, &c., B, &c., C, &c., D, &c., E, &c., F g g g, &c., represent the same or corresponding wheels, box, chain, rope, &c., as are more particularly described in the illustration of Plate No. 1, and it is deemed unnecessary to give a superfluous repetition of their description. K is a rope or cord fastened to the scroll-wheel, and traveling around it in an opposite direction to the chain D. To this cord a suitable weight, K<sup>2</sup>, is attached, and this weight operates as a balance to the follower while it is pressed down by the filling of the box with hay or other materials. This cord also operates in such manner upon the scroll-wheel that when the box is filled and the follower down the weight is raised and acts as an assistant in pressing. L represents the end of the shaft, to which the wheels are attached by flanges or otherwise. W shows the doors of the press thrown down or open to hoop and take out the bale when pressed. N<sup>2</sup> in Plate 3 shows said doors in a closed position.

Plate No. 3 shows the end of the press with the shaft and wheels, &c., attached. The edges of the wheels, the chains, &c., are marked with the same letters as in plates Nos. 1 and 2. L shows the shaft, of iron or wood. M repre-

sents the straps or boxes into which the shaft revolves, and by which it is connected with the posts of the press; N, the upper part of the box or trunk, into which the hay, &c., is pressed, and which can be thrown open outward and downward for the purpose of hooping and taking out the bale, as at W in Fig. 2. O is a bar which keeps the doors N closed, and may be removed to open them, one end passing out at the notch n. Q represents a capstan, to which the rope H may be attached, and the press worked by hand or horse power at pleasure. Y in Plate 1 is a chock or fall resting against one of the pins x x x, &c., in No. 3, and prevents the power-wheel from running back while the bale is hooping and being taken out.

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

The combination of the power and scroll wheels with the chain and follower of the press, the whole being constructed as herein set forth, or in any other manner substantially the same.

WM. C. VAN HOESEN.

Witnesses:

ISAAC PRUYN,  
ZOPHAR B. OSBORN.