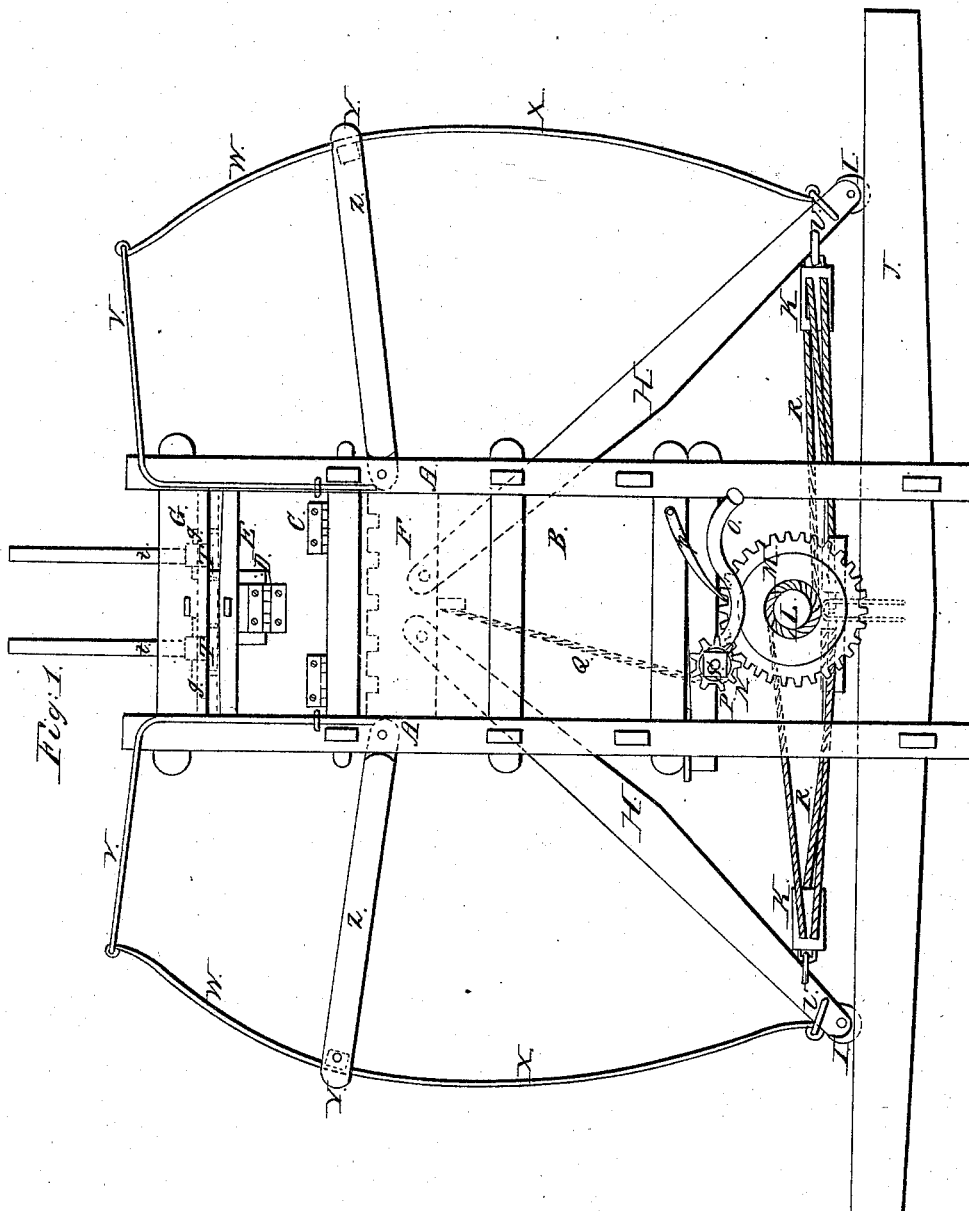


*G. Peck,
Cotton Press.*

N^o 3466.

Patented Mar. 9, 1844.



UNITED STATES PATENT OFFICE.

GEO. PECK, OF FAIRFIELD, CONNECTICUT.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. 3,466, dated March 9, 1844.

To all whom it may concern:

Be it known that I, GEORGE PECK, of Fairfield, Fairfield county, State of Connecticut, have invented a new and useful Improvement in Presses for Pressing Cotton 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 is an elevation of the machine.

The frame A of this machine may be made in the usual way by framing together four posts and the requisite number of sills, caps, and rails or girts. The box B, for containing the cotton, is formed inside this frame about two-thirds the depth of the frame or of any convenient depth.

C is the door where the cotton is admitted to the box; D, an additional or small door made in one of the large doors C, for admitting cotton when the doors C are closed and the box is nearly filled; E, the bars for securing the doors; F, the follower for pressing the cotton upward against the head-block; G, the head-block, fixed permanently in the head or top of the frame by spiking or nailing the timber to the under sides of the caps, grooved for the insertion of the cords around the bale; H, the two levers, attached to the under side of the follower by their upper ends, which are made large and formed with three arms, being made to enter three corresponding mortises in the under side of the follower, and inserting a suitable bolt; I, two wheels turning in shoes on the outer or lower ends of said levers, traveling in a groove in a railway lined with iron. The rollers, however, may be placed in the way and the levers made to move over them. J is the said railway grooved and shod with iron; K, blocks and tackle attached to the levers and to a central fixed post inserted into the way at the center of the machine, the ends of the rope of said blocks being passed around the windlass; L, the windlass; M, a cog-wheel on the ends of the windlass; N, a pinion working into said cog-wheel, and turned by a crank. This pinion is fixed on horizontal axle S, which has a sliding movement transversely for throwing said pinion in and out of gear with the cog-wheel, said sliding axle having also a hook or stud or pin inserted into it, over which is passed a rope attached to the follower, for

drawing it down by being wound on said axle when the latter is moved transversely and the pinion is ushipped from the cog-wheel.

O is a crank for turning the axle S; P, the pin or hook inserted into the axle S; Q, the rope attached to the follower and the said pin P in the sliding axle S. (Represented by dotted lines.)

T are pounders for pounding the cotton into the box. These pounders are made like the frustums of cones, and, when raised, fit into apertures of a corresponding shape made in the under side of the head-block, being held in that position by horizontal pins *g*, inserted through them above the head-block. The handles *t*, or stems, of said pounders are screwed or keyed into them. Their arrangement and use is to do away with the necessity of putting men into the box to trample the cotton. The shoes into which the ends of the lever are inserted are made of metal, the sides being extended, forming flanges or ears, between which the rollers are placed.

V W X represent a combination and arrangement of springs for drawing back the levers to a horizontal positions, in order to bring down the follower. Y is a roller to which the springs W X are fastened. Z are vibrating beams or arms in which the roller revolves. These beams are attached to the frame by bolts, on which they move. The spring V is attached to the frame and to the head of the spring W. When the levers are drawn toward the middle of the machine during the compressing operation, the aforescribed springs are contracted. The extension of the springs, or the effort to straighten themselves, draws back the levers H to nearly a horizontal position. The arms Z and top spring, B, rise and fall as the springs change their positions by the movements of the levers. This apparatus is to be used in conjunction with the axle S and cord Q, or without them.

In constructing the railway J the bottom of the groove should be made to have an inclination from the frame to the outer ends.

A ratchet-wheel should be placed on the windlass-wheel, in which a pawl attached to the frame works; or the pawl may be made to work into the teeth of the large cog-wheel, as represented at *p*.

The above-described machine is equally well adapted to the compressing of bales of cotton as to pressing the cotton into bales.

Operation: The levers H being extended, the follower F down, and the doors C open, the cotton or substance to be pressed into a bale is filled into the box B and pounded therein by the pounders T until the latter be filled. The doors C are then closed and secured by the bars E. The small door D is then opened, through which cotton is introduced to fill the remaining space in the upper part of the box. This being completed, the pounders T are raised and secured, and the small door D closed and made fast. The operation of pressing will then be commenced by turning the gearing M N. This will turn the windlass L and wind up the ropes R of the blocks and sheaves, which will draw the lower ends of the levers inward toward the windlass and toward each other, and at the same time cause the upper ends of the levers to rise with the follower F attached thereto, carrying with it the cotton, and pressing it into a compact body or bale against the permanent head-block G. The doors are then opened, the bale tied and removed. The sliding axle S is then moved transversely in its boxes, which unships the pinion from

the cog-wheel, and the rope Q, attached to the follower, is then made fast to the hook or pin P in the sliding axle. The axle is then turned by the crank O, which winds up the rope of the follower and draws the latter down into the box, at the same time extending the levers and leaving the machine ready for another operation similar to that above described, the pinion being again brought into gear with the cog-wheel. The follower may also be brought down and the levers be extended by the action of the spring V W X, as aforesaid; or said springs may be made to act in conjunction with the aforesaid sliding axle and rope in producing the same result.

I make no claim to the combined levers and follower, nor to the apparatus for drawing them together in pressing; but

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

The combination of the springs and levers for drawing down the follower, in the manner set forth.

GEORGE PECK.

Witnesses:

WM. P. ELLIOT,

ALBERT E. JOHNSON.