

P. K. DEDERICK.
Cotton-Presses.

No. 134,592.

Patented Jan. 7, 1873.

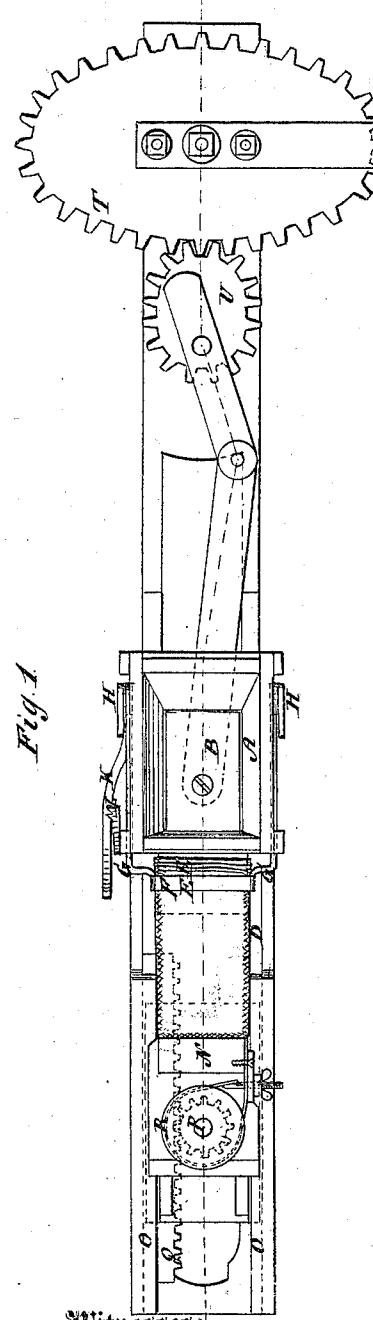


Fig. 1.

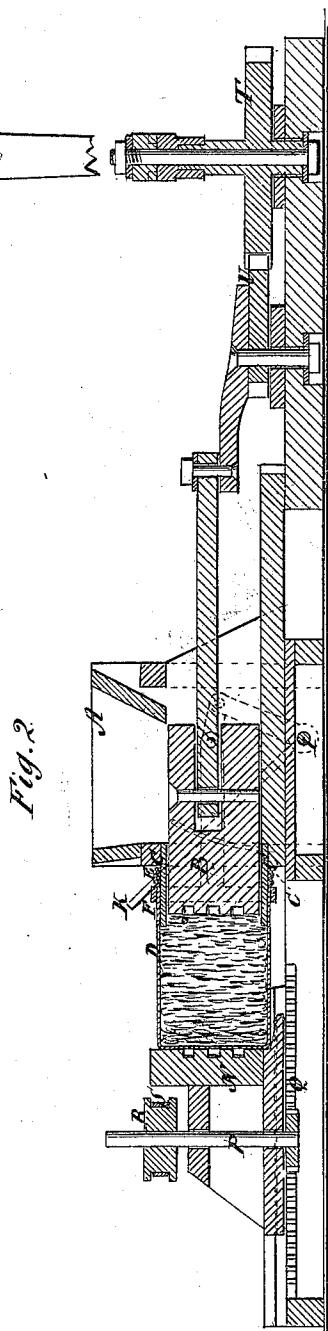


Fig. 2.

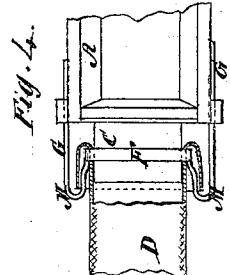


Fig. 3.

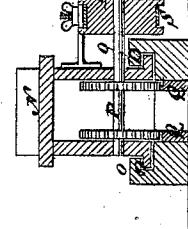


Fig. 4.

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PETER K. DEDERICK, OF ALBANY, NEW YORK.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. 134,592, dated January 7, 1873.

To all whom it may concern:

Be it known that I, PETER K. DEDERICK, of Albany, in the county of Albany and State of New York, have invented a new and Improved Cotton-Press, of which the following is a specification:

My invention consists of a press so contrived that the bale is sacked at the same time it is pressed, by having the prepared sack gathered on the open end of a short pressing-case, or on a holder of any kind, in connection with the pressing devices, so that the pressing and filling are accomplished simultaneously. This part of the invention is more particularly applicable to that class of presses in which the pressing is accomplished, progressively, by a continuously-operating follower acting upon a small batch, supplied in advance of it each time it draws out of the pressing-case, but it is also applicable to those presses in which the pressing is done progressively by rollers; also to other presses with which I propose to use it when I choose to do so. A presser-holder is combined with the part of the press-case from which the pressed cotton issues to regulate the delivery of the sack as the filling progresses. My invention also consists of a movable press-head against which the pressing is accomplished, and which recedes from the follower as the pressing progresses under the control of a friction-brake which regulates the measure of the compression.

Figure 1 is a plan view of my improved cotton-press. Fig. 2 is a longitudinal sectional elevation taken on the line xx of Fig. 1. Fig. 3 is a transverse section, showing a modified arrangement of the apparatus for regulating the action of the receding press-head; and Fig. 4 is a plan view of a section of the press, showing a modified arrangement of the pressure-holder for holding the sack and delivering it as the filling progresses.

Similar letters of reference indicate corresponding parts.

A is a hopper into which the cotton to be pressed is supplied in small batches in front of the follower B, which operates continuously and presses it into the short case C, which only extends about as far or a little further than the follower moves, where it terminates in an open end on which the open end of a

sack, D, for receiving the pressed bale, is gathered, as represented at E, being first passed through a yoke, F, surrounding the case, and constituting a pressure-holder which binds the sack on the case with more or less force, as required, and regulates the escape of the gathered sack as it fills. This pressure-holder is mounted on the sliding-bars G, fixed in suitable ways in the side of the case, to slide the yoke forward beyond the end of the case to facilitate the application of the sack, and said bars are jointed to the ends of the arms H of a rock-shaft, I, on which a hand-lever, K, is arranged to slide the yoke forward and back by oscillating the rock-shaft. A rack-bar, L, is arranged with the lever to lock it for holding the sack-holder on the case. The press C may be tapered a little to allow the sack-holder to bind the sack on with more or less pressure, as may be required under different conditions. With the arrangement of the sack-holder and its slide-bars, shown in Fig. 1, the empty sack has to be gathered on the case C; but I propose in some cases to have the slide-bars extended beyond the holder and doubled back to it, as shown at M, Fig. 4, so that I can fold the sack over the holder, inside out, for greater convenience in adjusting it; also, to increase the resistance to its escape and its tension while filling. N represents the sliding press-head, which is arranged in front of the case C in ways O, so as to slide up to and away from it. It is provided with a brake-shaft, P, to gear with one or more toothed racks on the ways as the head recedes from the case, and be turned to regulate the recession by a friction-brake, consisting of a disk, R, and an adjustable friction-strap, S; or it may be any other approved brake.

I propose to arrange this brake with a vertical shaft gearing with one rack on the bed-piece, as shown in Figs. 1 and 2; or horizontally with two wheels gearing with two racks on the bed-frame, as represented in Fig. 3; or in any other equivalent way.

T and U represent a pair of elliptical wheels which I have devised for multiplying the motion of the sweep on the follower, while at the same time giving a slow forward motion and a quick backward motion to it, which differ from the ordinary elliptical wheels used for producing a variable motion in that the driver

has its axis in its center and each semi-circumference divided by the major axis is constructed on a line conforming to the wheel U throughout its complete revolution, and said wheel, having half as many teeth as the driver, is so geared with it that the high parts of one wheel work in the low parts of the other as in other gears of this character.

The object of combining two elliptic wheels, one of which works on a central and the other on an eccentric axis, instead of two, each of which turns on an eccentrically-placed axis, as in my former patent, is, that I obtain two revolutions in the former to one in the latter, and can thus do double the work.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A baling-press, in which the sack for each bale is combined with the pressing devices during the process of forming the bale in such manner that the compressing and sacking are accomplished simultaneously and by the same operations, substantially as specified.

2. The combination, with the press-case C and the sack, of a pressure-holder for the sack, substantially as specified.

3. The combination of a movable press-head and a friction-brake with the press-case and follower, substantially as specified.

PETER K. DEDERICK.

Witnesses:

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