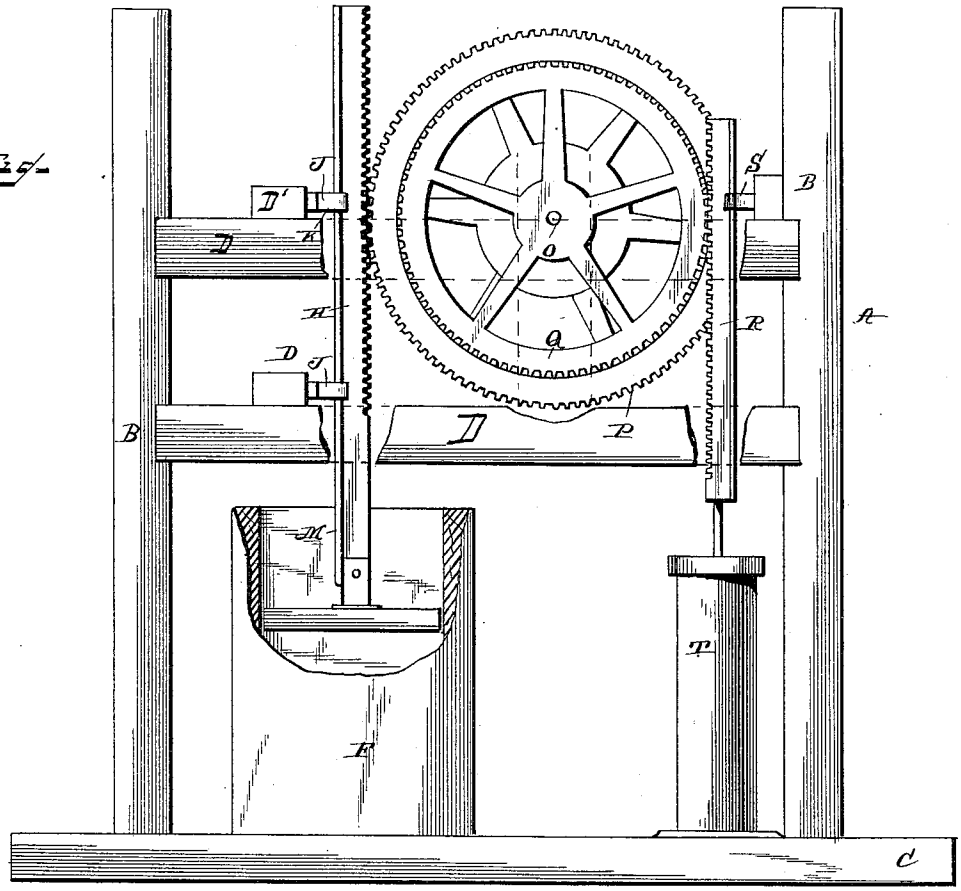
(No Model.)

F. BRADY.

MACHINE FOR PACKING COTTON.

No. 403,734. Patented May 21 1889.

Fig 1.



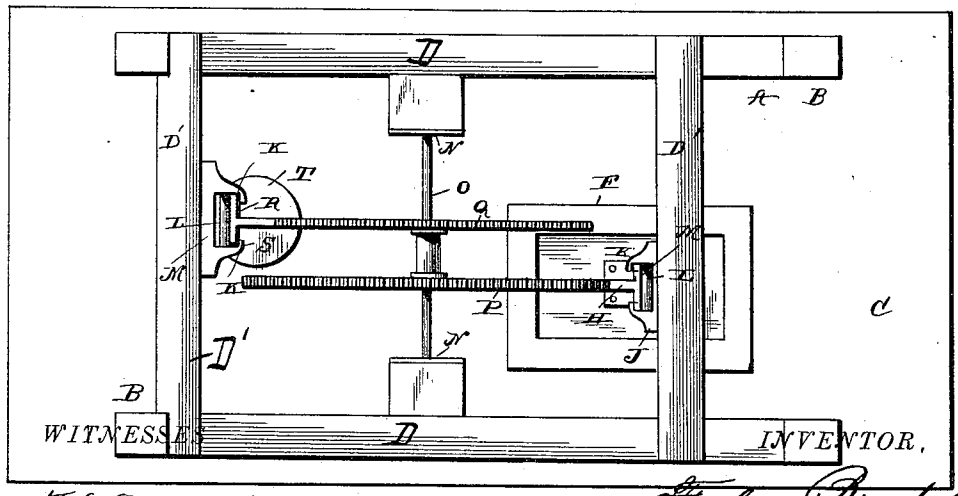


Fig 2

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UNITED STATES PATENT OFFICE.

FARLEY BRADY, OF WAXAHACHIE, TEXAS.

MACHINE FOR PACKING COTTON.

SPECIFICATION forming part of Letters Patent No. 403,734, dated May 21, 1889.

Application filed June 23, 1888. Serial No. 277,940. (No model.)

To all whom it may concern:

Be it known that I, FARLEY BRADY, a citizen of the United States, and a resident of Waxahachie, in the county of Ellis and State of Texas, have invented certain new and useful Improvements in Cotton-Packers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of my improved cotton-packer with a portion of the supporting-frame, and also with a portion of the press-box, shown broken away to more clearly illustrate the character of my invention; and Fig. 2 is a top plan view of the same.

Similar letters of reference denote corresponding parts in both the figures.

My invention has relation to that class of devices known as "cotton-packers," which pack the cotton preparatory to baling the same; and it has for its object to provide means whereby a powerful pressure is exerted upon the cotton while in the press-box, and also to so construct the packer that a great amount of labor is saved.

To this end my invention consists in the improved construction and combination of parts of the same, as will be hereinafter more fully described.

In the accompanying drawings, the letter A denotes the frame upon which my invention is mounted, but the construction of which may be changed at pleasure. This frame consists of the posts or uprights B, secured upon the base-piece C and connected together by the longitudinal beams D and cross-beams D′.

F indicates the press-box of ordinary construction, within which the follower-block slides. This block is secured to a vertically-reciprocating rack-bar, H, by means of two angular metallic strips, I. (Shown in Fig. 1 of the drawings.) This rack-bar reciprocates vertically, and is guided by brackets J, secured to two of the cross-beams D′. Each of these brackets is formed with arms K, pointing toward each other and provided with an anti-friction roller, L, which engages the rear flat portion, M, of the said rack-bar, while the arms of each bracket engage the opposite flat portion, as shown in Fig. 2 of the drawings. Thus it will be seen that the said rack-bar will be guided up and down and be prevented from moving laterally, which would cause it to be thrown out of gear with its meshing wheel, and it will also be seen that by the employment of the anti-friction rollers friction is reduced to a minimum.

Journaled in two bearings, N, secured to the longitudinal beams of the frame, is a shaft, O, having keyed thereon two cog-wheels, P and Q, respectively, the large one of which, P, meshes with the follower-block rack-bar, while the smaller one meshes with a similar rack-bar, R, moving vertically in a bracket, S, precisely the same in construction as the brackets which guide the follower-block rack-bar. This rack-bar R receives motion from a piston inclosed within the steam-cylinder T, the rod of which piston is secured to the lower end of the rack-bar. The cylinder is supplied with steam in the well-known manner, and consequently it is thought that an illustration of the valves and steam-chest will not be required, as they do not form in themselves any part of my invention.

It will now be seen that as the shaft is made to revolve by the steam-actuated rack-bar engaging the small cog-wheel the larger wheel, which is keyed to the smaller one, revolves in unison with it and engages the follower-block rack-bar, causing the block to be forced downwardly upon the contents of the press-box with a greater speed than the steam-actuated rack-bar moves upwardly, thus imparting a powerful pressure to the follower-block. Upon the downward stroke of the piston its rack-bar is lowered and the follower-block rack-bar is raised to enable the person feeding the press-box to place more cotton therein.

From the foregoing description, taken in connection with the accompanying drawings, the operation and advantages of my invention will be readily understood without requiring an extended explanation. It will be seen that the invention is simple in construction, not liable to get out of order, and performs its duty in an exceedingly efficient manner, while it takes only one person to work it.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a cotton-packer, the combination of the frame, guides mounted therein, rack-bars moving in the said guides, a press-box and steam-cylinder, and heads secured to the rack-bars and moving in the press-box and cylinder, respectively, cog-wheels of different diameters journaled in the frame and meshing with the rack-bars, and anti-friction rollers pivoted in the guides and bearing against the rack-bars, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

FARLEY BRADY.

Witnesses:
J. E. LANCASTER,
E. L. HUFFMAN.