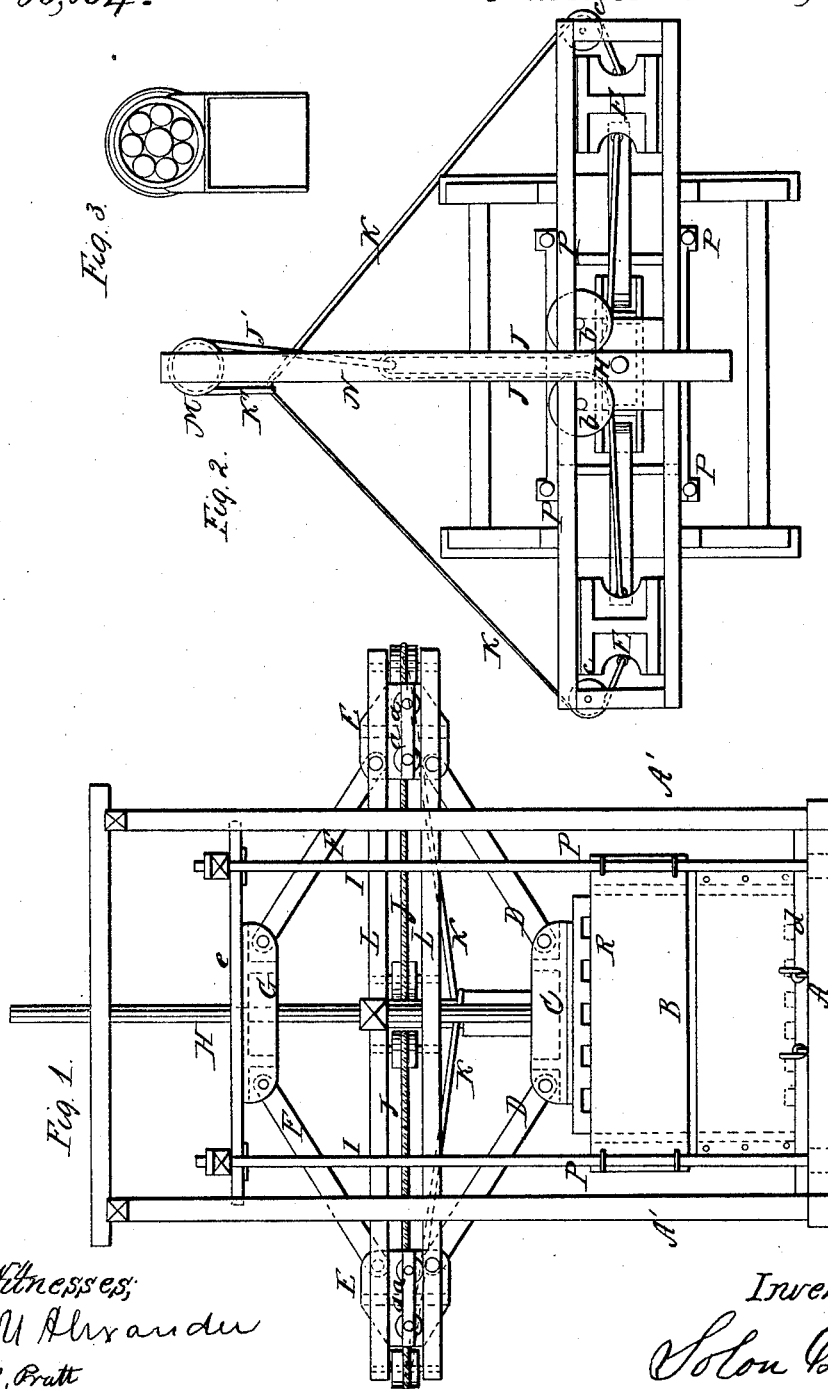


*S. Dike,*  
*Cotton Press.*

*N<sup>o</sup> 30,394.*

*Patented Oct. 16, 1860.*



*Witnesses;*  
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# UNITED STATES PATENT OFFICE.

SOLON DIKE, OF COLUMBIA, SOUTH CAROLINA.

## IMPROVED COTTON-PRESS.

Specification forming part of Letters Patent No. 30,394, dated October 16, 1860.

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

Be it known that I, SOLON DIKE, of Columbia, in the district of Richland and State of South Carolina, have invented certain new and useful Improvements in Cotton and other Presses; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in constructing and arranging the several parts of my press in the manner hereinafter set forth.

In the annexed drawings, Figure 1 represents a side elevation. Fig. 2 represents a top view with a portion of the upper part of the frame removed. Fig. 3 is a view of a bearing, which will be described.

In the figures, A A' represent the frame of the press, which is made of any suitable size or material and in a strong and substantial manner, A representing the bottom, and A' A' the vertical standards or supports erected upon said bottom.

L L represent cross-bars, which are secured between the vertical standards of the frame, as represented in the drawings. The bars L L are placed sufficiently wide apart to allow of the wheels *a a* of the trucks E E to pass backward and forward between them, said wheels *a a* being made to roll upon the lower bar L.

P P P P represent four metallic rods or bars, which are placed vertically within the limits of the frame, and which connect the foot-block *d* to the head-block *e*. The foot-block *d* forms the bottom of the cotton-box.

B represents the cotton-box, which is made in any of the usual forms, and in any known manner.

G and C represent metallic frames, to which the levers F and D are attached or secured at one end, the frame G being secured to the under side of the head-block *e*, and the frame C being secured to the upper side of the press-head R. The levers D D connect the frame C to the trucks E E, and the levers F F connect the frame G to the said truck, as represented in Fig. 1, in such a manner that when the trucks approach each other, running upon the lower bar L, the levers cause the two frames G and C, and consequently the head-block *e* and the press-head R, to recede from each other; but at the same time they cause the foot-block *d*

(upon which the cotton-box is erected) and the press-head R to approach each other. The reverse is of course followed with the contrary effect. When the trucks are removed from each other, the levers cause the foot-block *d*, and consequently the press-head R, to recede from each other.

K K represent two cords, (one being secured to each truck,) which pass around pulleys *c c* at the extremities of the bars L and connect with a cord, K', which latter cord passes around a capstan, M. These cords are for the purpose of drawing the trucks apart or toward the extremities of the bars L L.

J J represent cords secured to the opposite sides of the trucks, which pass around the pulleys *b b*, and which serve to draw the trucks together. The cords J J connect with a cord, J', which passes around the capstan M, also in an opposite direction from the cord K'. When the capstan M turns, it will be readily seen that one of the cords is wound around it while the other is unwound.

H represents a guide-bar, which passes through the head-block *e*, the frame G through a horizontal bar, N, which crosses the bars L L and is secured firmly in the frame C, or in the press-head R, attached to it. The object of the bar H is to guide the head R and frame G, and keep them in proper line with the cotton-box, with each other, and regulate the motion at all times of the levers F and D.

A bar projects horizontally from the bottom of the frame A, and a bar, N, parallel to it, projects from the frame a short distance from its top, as seen. Between these two bars the capstan stands, having its bearings in each. The upper end of the capstan may be surrounded, as seen in Fig. 3, with a collar, which is filled with friction-rollers, against which the end of said capstan has its bearing. As the capstan revolves, the friction-rollers turn and follow each other around and around in the collar.

It will be understood that the rod or bar H is not intended at all for applying power to the press-head R. It is only intended as a guide for the press-head, and for keeping the several parts of the press described in proper position. This rod may have bearings at several points along its extremity for the purpose of keeping it in a true vertical position, whereby it is always enabled to keep the levers in

proper position and the head in direct line with the cotton-box.

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

1. The employment of the guide-rod H, operating and secured in the manner herein represented, for the purpose of directing the press-block R, and for keeping the levers F and D in proper position, substantially as specified.

2. The trucks E E, secured between the bars

L L, and operating in connection with the levers F F and D D, frames G and C, guide-rod H, and cords K and J, substantially as and for the purpose specified.

3. In combination with the subject of the second claim, the arrangement of the capstan M, operating substantially as specified.

SOLON DIKE.

Witnesses:

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