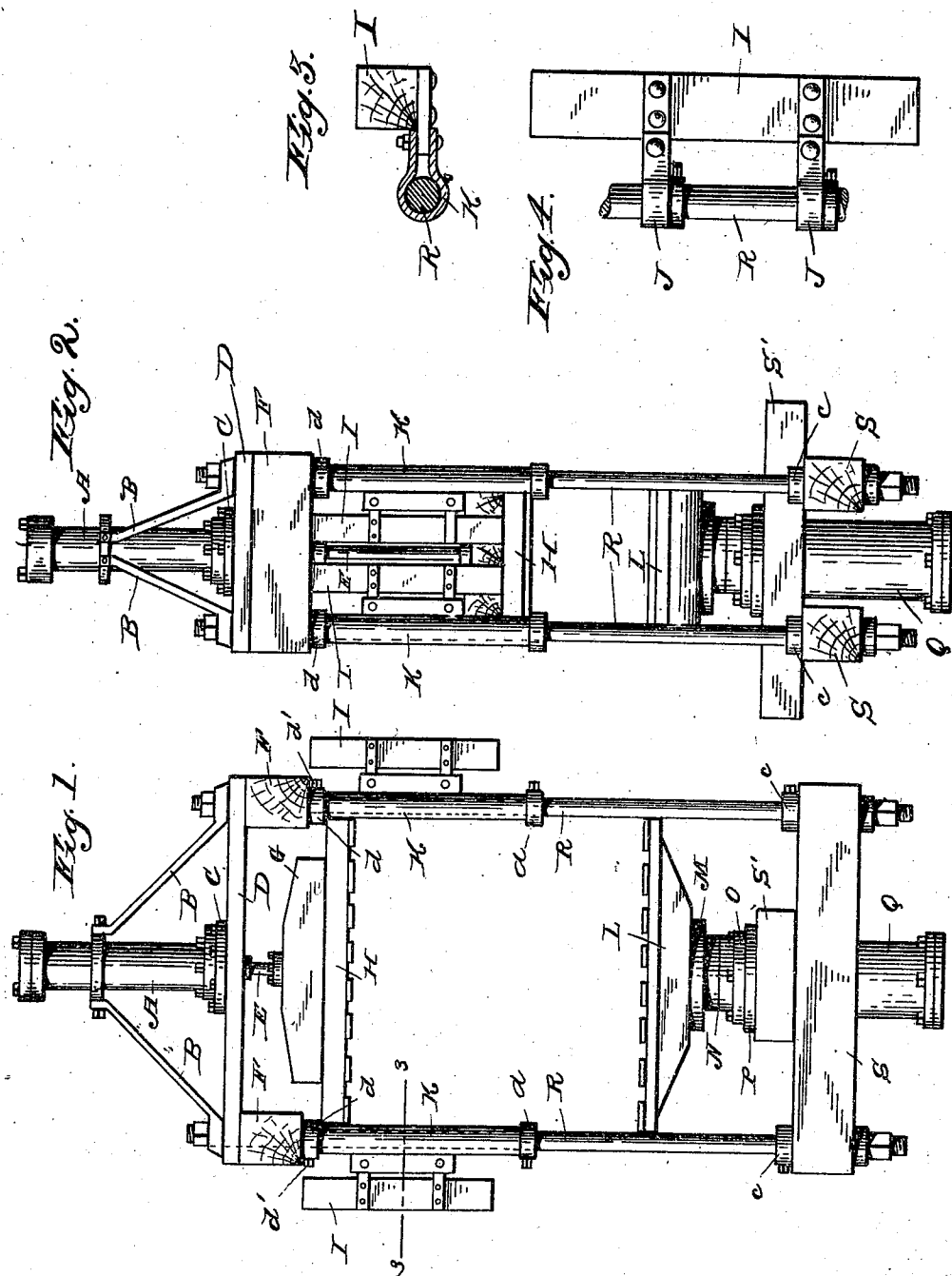


(No Model.)

J. L. McCUTCHEON.
COTTON PRESS.

No. 502,313.

Patented Aug. 1, 1893.



Witnesses
J. M. Goodykoontz
A. W. Harrison.

Inventor
Joshua L. M^{re} Litcher
by Wright, Brown & Grosvenor
Attorneys

UNITED STATES PATENT OFFICE.

JOSHUA L. McCUTCHEON, OF HOUSTON, TEXAS, ASSIGNOR OF ONE-HALF TO
JAMES S. PRICE, OF SAME PLACE.

COTTON-PRESS.

SPECIFICATION forming part of Letters Patent No. 502,313, dated August 1, 1893.

Application filed June 30, 1892. Serial No. 438,499. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA L. McCUTCHEON, of Houston, in the county of Harris and State of Texas, have invented certain new and useful Improvements in Cotton-Presses, of which the following is a specification.

My invention relates to cotton-presses and has particular reference to that class in which the cotton, either in the form of a continuous folded bat or otherwise, may be pressed between a stationary and a steam or hydraulic power operated platen.

My objects are to combine in one press the advantages of the quick but not extremely powerful pressure of the ordinary steam press, and the powerful but slow pressure of the hydraulic press; and to this end, my invention consists in the construction and combination of parts as hereinafter described and claimed.

In the drawings which accompany and form part of this specification, Figure 1 is a front elevation of so much of the completed press as is necessary to illustrate my invention. Fig. 2 is a side elevation of the same, but with the upper platen and the swinging blocks in a different position. Fig. 3 is a detail section on line 3 3 of Fig. 1. Fig. 4 is a detail elevation, illustrating a slightly modified form of support for the swinging blocks. Figs. 3 and 4 are on a slightly larger scale than the other figures.

Similar letters of reference in the several views indicate the same parts.

The frame of the press includes the fixed uprights or standards R R, the timbers F and connecting plate D at the upper end, and the timbers S S' at the lower end. Above the frame and held vertically thereon by stays B, is secured a steam cylinder A, the lower flange C of which is bolted to the plate D. The lower end of the piston E is connected to a follower G which, in turn is connected to the platen H, by any suitable means.

L represents the lower platen bolted on the flange or head M of the hydraulic ram N, working in a cylinder Q, the upper end of which has flanges O P through which bolts pass for securing the cylinder and ram to the timbers S'.

The distance between the two cylinders A and Q and consequently between the normal

positions of the two platens may be somewhat varied or adjusted by the following means.

The standards R pass through openings in the timbers F and S and these parts are secured in relative positions by set collars *c d* on the standards, on one side of said timbers and nuts on the opposite sides thereof. By adjusting the collars and nuts, on the standards, in a manner readily understood, the distance between the cylinders may be altered to suit different conditions of use.

Supported by suitable collars on the standards R, are tubes K which are free to be turned thereon, and which support strong blocks or struts I, the purpose of which will presently be explained.

Instead of the tubes K, I may employ a pair of strap arms as shown at J in Fig. 4.

The operation is as follows—The two platens being in the position shown in Fig. 1, the cotton to be pressed is placed between them and steam is admitted to the cylinder A to depress the platen H and thus partially depress the charge of cotton. When the platen H has been depressed to the proper extent, the blocks I I are swung around until they are interposed between the timbers F and the upper surface of the platen H each side of the follower G, and are then in position to firmly support the said platen against the powerful upward pressure of the hydraulic ram which is then operated to complete the compression of the cotton for baling.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a cotton press, the combination with the frame, of two platens independently movable toward each other to compress the material between their faces, motors separate and independent from each other for operating said platens, and blocks or struts adapted to be interposed between portions of the frame and the back of one of the platens, for the purpose set forth.

2. In a cotton press, the combination with the frame, of two platens independently movable toward each other, a motor for each platen, one of which is adapted to impart a quick but light pressure, and the other a slow but powerful pressure, the two motors being en-

tirely separate and independent from each other, and blocks or struts adapted to be interposed between the light pressure platen and suitable fixed supports to sustain the
5 pressure exerted by the heavy pressure platen, substantially as described.

3. In a cotton press, the combination with the frame including standards, of two platens independently movable toward each other,
10 and blocks or struts pivotally supported on said standards and bodily movable in a horizontal plane, whereby they may be swung in-

ward over the upper platen and rest with their lower ends on said platen and their upper ends against a portion of the frame, substan- 15
tially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 20th day of June, A. D. 1892.

JOSHUA L. MCCUTCHEON.

Witnesses:

T. C. BAIRD,
Z. C. LAW.