

W. RUFFIN.
Cotton-Presses.

No. 149,342.

Patented April 7, 1874.

Fig. 1.

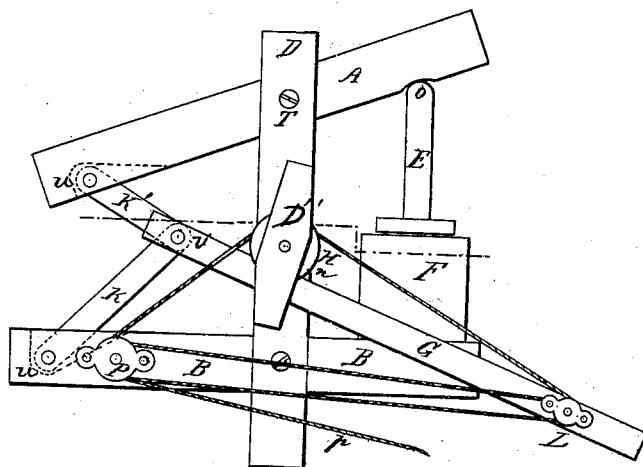
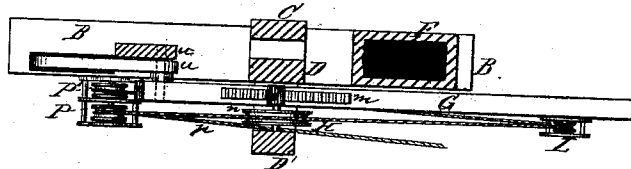


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM RUFFIN, OF MEMPHIS, TENNESSEE.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. **149,342**, dated April 7, 1874; application filed December 6, 1873.

To all whom it may concern:

Be it known that I, WILLIAM RUFFIN, of Memphis, in the county of Shelby and State of Tennessee, have invented certain Improvements in a Cotton-Press, of which the following is a specification:

My invention relates to a pitman in combination with a lever, and on the face of the pitman is a rack, geared to a spur-wheel, and worked by a bull or driving wheel, when attached to power. When used either by hand or horse, a log-chain or rope is attached to the pitman, and over pulleys to a capstan or other means of working the same.

The lever-timbers are hewed, as well as the stanchions, pitman, and bed-plate. To the bed-plate are attached, extending upward and at right angles with it, two stanchions, one on each side of the main lever. This lever is held in position either by a pin passing through it at its fulcrum, and through the stanchions, or by the forming of a socket-joint by the bolting of strips to the lever on each side, or by the cutting away of a part; also, by bolting pieces of timber between the main stanchions, thus forming a joint or bearing. To the short end of the lever the follow-block is attached by a toggle-joint, and to the other end of the lever is attached a toggle-jointed lever, formed of two timbers, and jointed in its center, the one end being fastened to the main lever, and the other resting on a bearing below. At the joint of this lever is attached the pitman, which is provided with a rack, geared to a spur-wheel, (and a driving-wheel, if power is used,) and by a backward motion of the pitman it straightens the double lever, forcing up the main lever at that end, and forcing down the other end, to which is attached the follow-block. All these parts should be constructed of substantial timbers to resist the pressure while in use.

The accompanying drawings, to which reference is made, show, first, a side elevation; secondly, a transverse sectional view.

B is the bed-plate. C D are the stanchions,

fastened to the bed-plate, and extending upward at right angles therewith on each side of and supporting the main lever A. At T is a bolt, acting as the fulcrum of the lever A; or the bearing may be formed by pieces bolted above and below the lever A between the uprights C D, the short end of the main lever A descending as the other end ascends, or vice versa. K K' are two levers, worked in sockets *u u'* in the bed-plate B and lever A, respectively. The pitman G is connected with the levers K K' at the joint *v*. H is a pulley on a shaft. This shaft has its bearing in the upright D and bracket D', attached to the outside of the upright D. I is a small spur-wheel on the shaft. On the pitman G is a rack to gear with the spur-wheel I, said pitman working against friction-rollers (not shown in the drawing) fastened to the uprights. E is the driver and follow-block, working in a socket, *o*, on the lever A; F, the press-box, built on the bed-plate B, and of ordinary construction. P, P', and L are pulleys, employed in connection with the rope *p* for working the levers.

In working the press by hand or horse power, a rope or chain, *p*, above referred to, is employed with the pulleys H, P, P', and L; and, when power is used, the rack *m*, spur-wheel I, and driving-wheel are employed.

A screw could be used in place of the pitman. The levers K K' and pitman G may be reversed, gearing attached to the rear of levers A, instead of on the side of the press, as described above.

What I claim as my invention is—

The combination of the pitman G, levers K, K', and A, pulleys P, P', and L, rope or chain *p*, rack *m*, and spur-wheel I, constructed substantially as described, for the purposes set forth.

WILLIAM RUFFIN.

Witnesses:

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