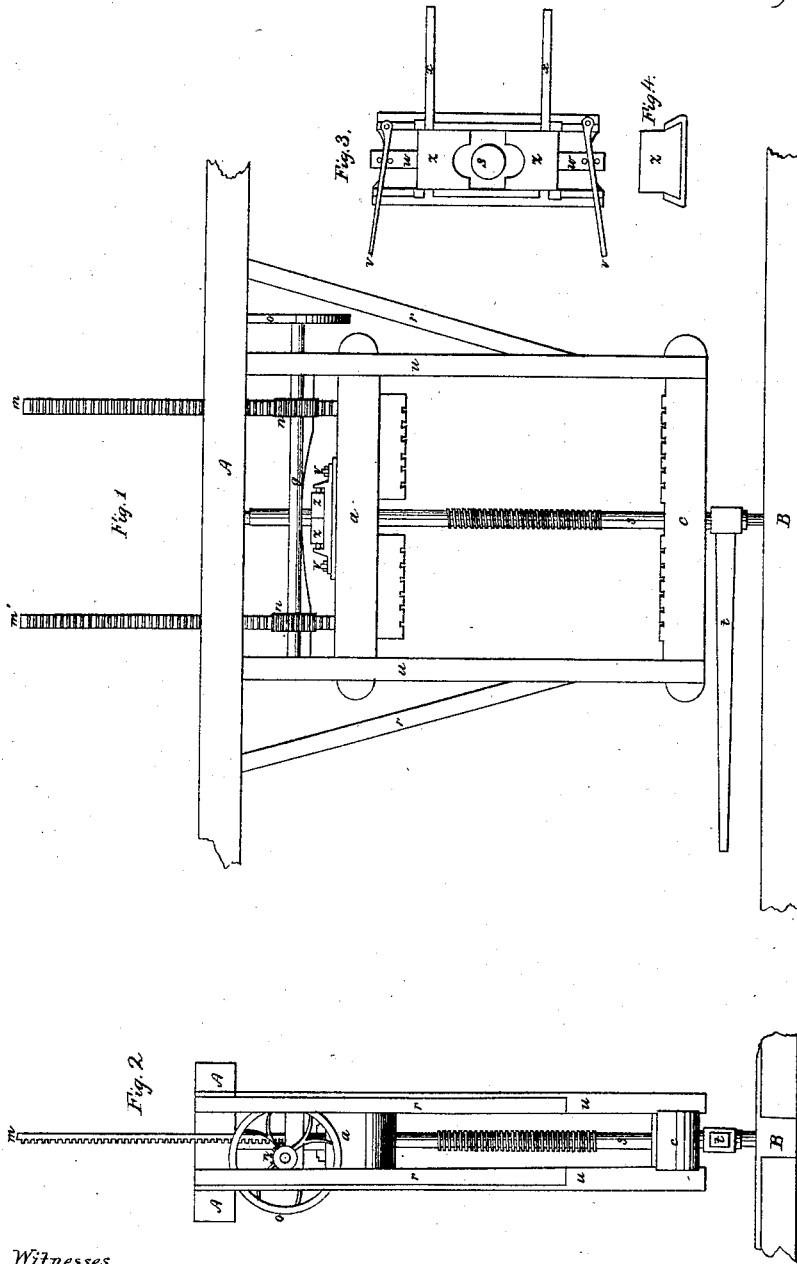


A. Jones, Cotton Press.

N^o 992.

Patented Oct. 26, 1838



Witnesses
James B. Hamil

Inventor
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UNITED STATES PATENT OFFICE.

ALEXANDER JONES, OF NEW ORLEANS, LOUISIANA.

IMPROVED COTTON-PRESS.

Specification forming part of Letters Patent No. 992, dated October 26, 1838.

To all whom it may concern:

Be it known that I, ALEXANDER JONES, of the city of New Orleans, in the State of Louisiana, have made certain Improvements in the Cotton-Press, or in a Press for the Pressing of Cotton and other Elastic Substances; and I do hereby declare that the following is a full and exact description thereof, reference being had to the drawings which accompany and make a part of this specification.

My improved cotton-press consists of an upright screw of any desired length, with bearings permanently fixed at top and bottom, in which the ends of the screw turn by means of a lever. Attached to the follower are two racks, in which work two pinion-wheels fixed on a shaft which is moved or turned by a wheel acted upon by an endless rope. By means of this wheel-shaft, pinions, and racks the follower can be hoisted or lowered in a few minutes by hand, or other simple means. On top of the follower there is an iron box, in which move female-screw-nut pieces that are forced up to embrace the female screw at any point desired, or drawn asunder again by means of levers, so as to admit of the lowering or raising the follower in the manner above described, and of the free passage of the screw as the follower is moved up or down. When it is desired to put the screw in action, the follower is lowered by the means above described as far as desired, and the two female nut-pieces are forced up to embrace the threads of the male screw, and confined there by cross-bars of iron resting across the outside ends of the female nut-pieces, and across and inside of upright projections of iron, which confine them in their position. When the desired pressure is completed with the screw, the cross-bars, which have hinges at their ends, are thrown off, and the nut-pieces again drawn asunder by means of the levers, and the follower again carried up by means of the wheel, racks, and pinions, as above mentioned, thus preparing the press in a few minutes for fresh materials of cotton or other substances for pressure, and thus differs from any press hitherto known or used. The racks and pinions alone, or the screw alone, working in a solid female screw, have both been used as presses, or in the pressing of cotton, &c.; but the uniting the action of the two in the same

press by means of the divided female-screw nuts, as above and hereinafter described, is substantially my own invention, and not hitherto known or used.

In the accompanying drawings are shown front and end or side elevations of my machine or press, with the other parts attached to the same when in use.

The same letters refer to the same parts in each figure.

Figure 1 is a front view of the press, in which at A are represented strong beams, which may form part of the joist or be framed in, if preferred, in the gin-house; B, the sleeper; C, the bed of the press; *a*, the follower, through which the screw S passes to the two-part nut Z Z, which will be more particularly described by Figs. 3 and 4. *m m* are two racks attached to the follower *a*, and moved by means of the pinions *n n*, which are fixed on the same shaft, *q*, to which the grooved wheel *o* is attached; and if an endless rope be wound round the groove and hauled on from below the racks *m m* will be raised, together with the follower *a*, to which they are attached, provided the two part-nut Z Z is previously opened, so as to let the screw slide through the follower independently of the nut. There is a metallic head for the top of the screw to work in, and a metallic step for the lower end of the screw to work in. At *t* is shown a lever, to the end of which a horse is applied to turn the screw after the follower has been lowered by the racks, as far as it can be, on the bales of cotton or other substances in the press, and the nut-pieces have been closed on the thread of the screw. Grooves are formed in the bed and follower to receive packing-cords, as usual.

Fig. 2 is an elevation of the right-hand side of the press, in which the same letters refer to the same parts as above.

Fig. 3 is a plan of the two-part nut on a larger scale, represented open, and in order to shut it, proceed as follows: S represents the screw and Z Z the two halves of the nut, with pieces *w w* forming part of each of them, and on these pieces at *w w* are two pins standing up, so that the levers *v v* (which move on a pivot at one end) may pass between these pins. Press the levers toward each other, and the two halves of the nut will close round the thread of the screw by sliding on the bed of the nut. Then

shut the bars *xx* forward, in the manner of a hinge, into the spaces made to receive them on the edge of the bed of the nut in front, and the nut will be firmly secured in its place. Reversing the process will, of course, open the nut. The nuts are dovetailed into the metallic boxing or bed of the nuts, as shown at Fig. 4, which bed or boxing is firmly bolted to the top of the follower.

u u r r, Fig. 1, represents the frame of the press firmly braced and attached to the joist or frame-piece A in the gin-house.

What I claim as my invention, and wish to secure by Letters Patent, is—

The method of combining and working the screw with the racks and pinions, wheel and shaft in the same press by means of the two pieces of female-screw nuts, constructed on the plan and working substantially in the manner and upon the principle herein set forth, whether applied to the pressing of cotton, hay, or other substances, by means of which the expedition of the operation is greatly increased.

ALEXANDER JONES.

Witnesses:

JAMES B. FRANCIS,

GEORGE BROWNELL, Jr.