2 Sheets
Sheet. 1.

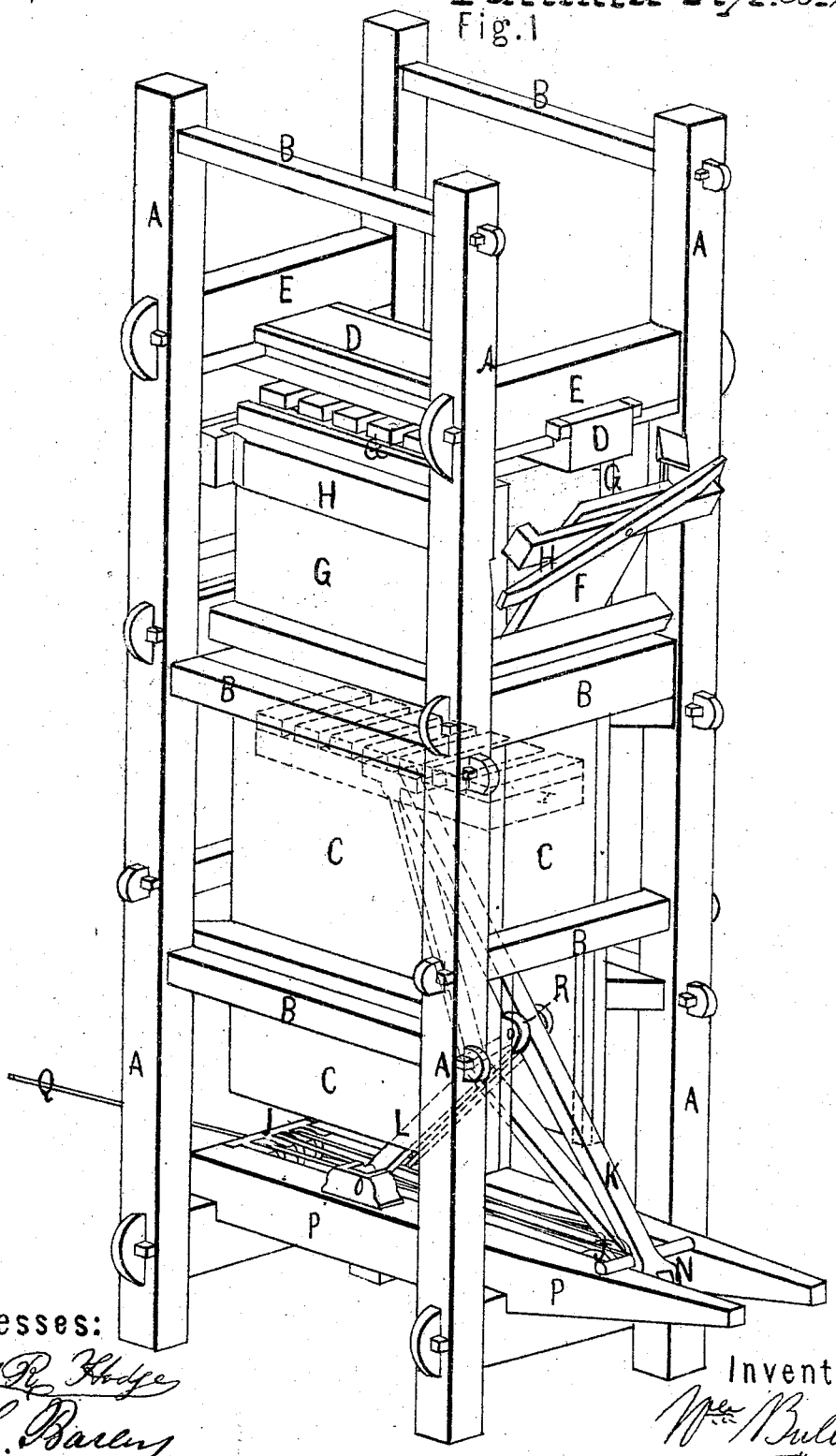
W. Bullock.

Hay Press.

No. 3288

Patented Sept. 28. 1843.

Fig. 1



Witnesses:

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J. H. Barry

Inventor;

Wm. Bullock

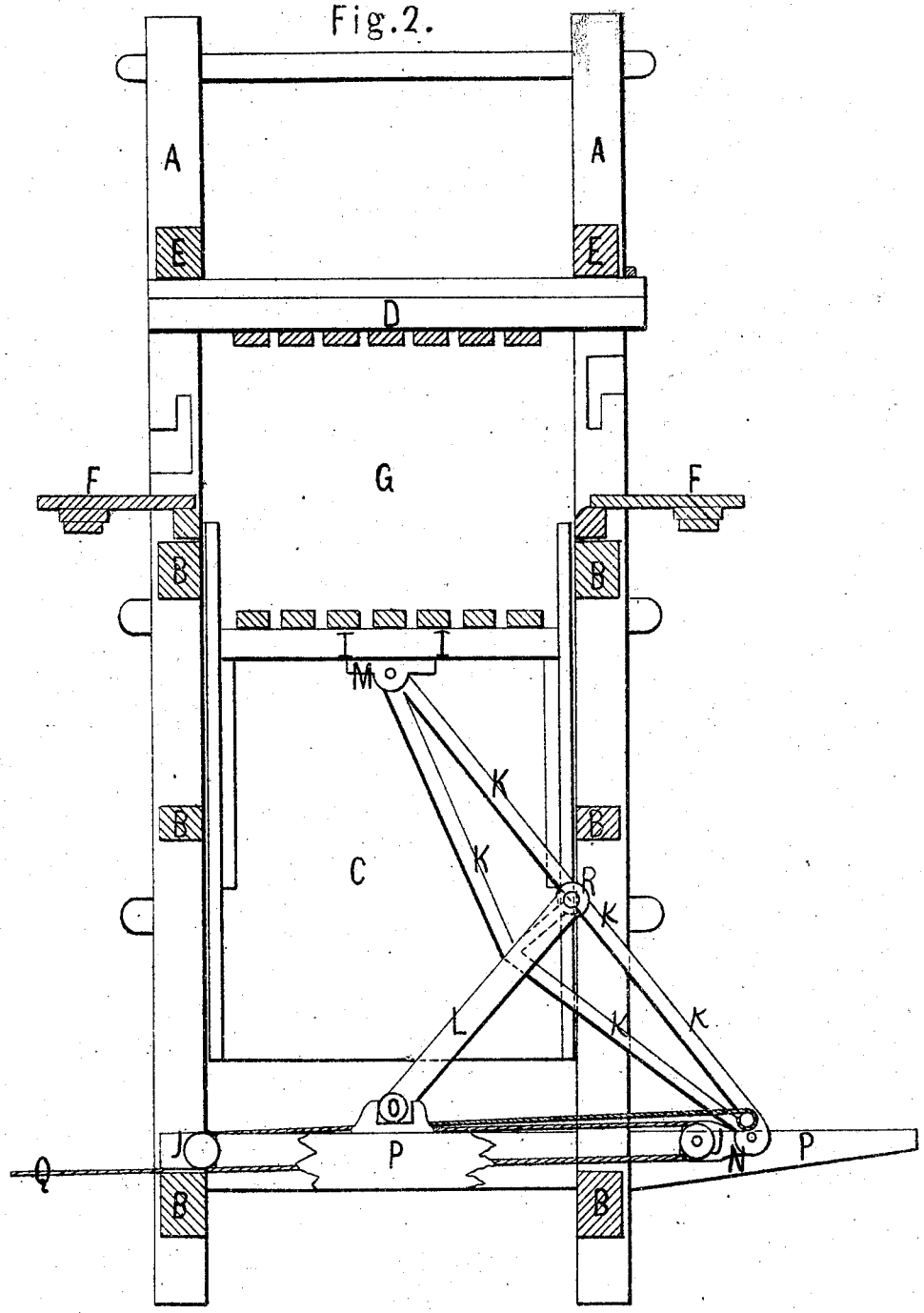
3 Sheets-
Sheet. 2.

W. Bullock.

Hay Press.

No 3288 Patented Sept 28. 1843.

Fig. 2.



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3. Sheets.
Sheet. 3.

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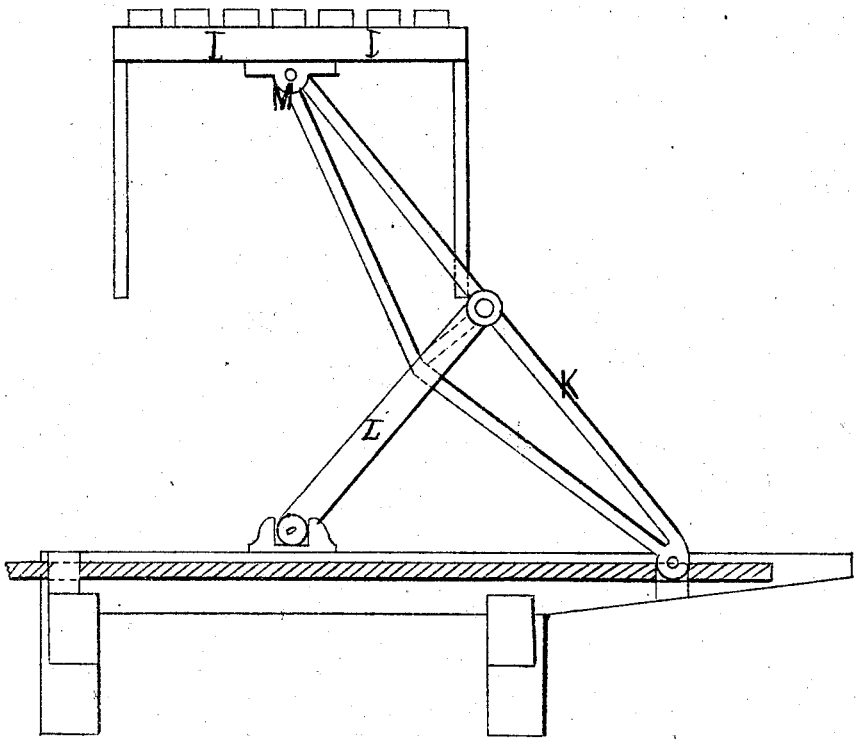
Hay Press.

No 3288 Patented Sept 28. 1843.

Fig. 3.



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Inventor:
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UNITED STATES PATENT OFFICE.

WM. BULLOCK, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO CHAS. BARTLET, (IN PART.)

IMPROVEMENT IN COTTON AND HAY PRESSES.

Specification forming part of Letters Patent No. **3,288**, dated September 28, 1843.

To all whom it may concern:

Be it known that I, WILLIAM BULLOCK, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Press for Pressing of Hay, Cotton, &c.; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in procuring an immense power for pressing by the combined mechanical arrangement of compound levers and toggle-joint, in combination with the ordinary block and tackle, which I term my "compound lever and toggle-joint press," as is fully set forth in the accompanying drawings and following description.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my press, as per drawings, Figures 1 and 2, with four main posts or standards, A A A A, about ten inches square and eighteen feet long, being held together by cross-framing B B B B, mortised in the upright standards at various heights. Within this main frame is a trunk or box, C C C C, which is about ten feet deep, the inside area being to the determined size of a bail of cotton or hay. At the top of the press (marked D D) is a head-beam, which slides in the under side of the two cross-pieces E E, said head-beam being for the purpose of receiving the whole pressure or strain of the press in an upward direction when the bail is pressing.

The manipulation of working the press is as follows: You first take out the beam D D, and then turn down the two sides F F and G G, which work on a hinge. Your press is then ready to receive the cotton in the trunk or box, and when full turn up again the sides and ends F F and G G, and lock them by means of the lock-pieces H H, and replace the head-beam D D. The cotton is then ready for pressing, which is operated upon by the follower I I, the said follower receiving its power by the combined action of the block and tackle J J and the compound levers and toggle-joint K K and L L, the follower I I, being fastened to the upper end of the lever K K by means of a swivel-joint, M, and on the lower end to a swivel-block and sheaves, N N, the lever L L working on a fulcrum, O, which rests in the center of the running-beam P, and working at the other end by means of a center pin in the center of the lever K K. Now, it will be readily seen that by pulling on the rope Q you will have the mechanical power of the block and tackle which draws the lever K inward, which, with the combined connection of the lever L L, having a working center at R, and resting on the fulcrum O, forms a compound lever, which I shall term my "compound lever and toggle-joint," so that the power of the press increases as the follower gets near the top, which is just what is necessary for cotton or hay.

The press may be worked by power or hand, and may be much increased in power by working the rope over a small windlass; or instead of working by block and tackle may use a screw, as is shown in Fig. 3.

What I claim as new in the above-described press, and desire to secure by Letters Patent, is—

The above-described method of constructing a press—that is to say, a press in which is operated a single toggle-joint—by means of an arm which is extended beyond the movable fulcrum of the joint, to the end of which arm the power is applied so as to act in a direction at right angles to the line in which the follower moves, the application of the power being made through the medium of pulleys or other analogous device, substantially in the manner and for the purpose set forth.

WM. BULLOCK.

Witnesses:

THOS. P. JONES,

CLEMT. T. COOTE.