J.H.F. Fellows,

*III*45,559.

Cotton Press.

Patented Dec. 20, 1864



Witnesses

The Tusch Henry Marie

Inventors John 11 Fellows Year Muniffe attorneys

## AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS.)

## UNITED STATES PATENT OFFICE.

JOHN H. FELLOWS, OF LEWISPORT, ASSIGNOR TO HIMSELF AND D. DUNN, OF LOUISVILLE, KENTUCKY.

## IMPROVED DOUBLE-ACTING COMPRESS.

Specification forming part of Letters Patent No. 45,559, dated December 20, 1864.

To all whom it may concern:

Be it known that I, JOHN H. FELLOWS, of Lewisport, in the county of Hancock and State of Kentucky, have invented a new and Improved Double-Acting Compress; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable any person skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal vertical section of this invention, taken in the plane indicated by the line x x, Fig. 2. Fig. 2 is a horizontal section of the same, the line y y, Fig. 1, indicating the plane of section.

Similar letters of reference indicate like parts.

This invention consists in combining two pairs of sliding followers with each other, and with an intermediate cross-head and pair of toggle-arms, in such a manner that by imparting to the cross-head a longitudinal sliding motion in the proper direction the two pairs of followers, situated on either side of the crosshead, are caused to close up, and by moving the cross-head in the opposite direction the followers are caused to open simultaneously, and by this arrangement two bales of cotton, hay, or other material can be pressed at once and in the same time which with presses of the ordinary construction is occupied in pressing one bale. A represents the frame-work which supports the working parts of this press. From this frame-work rise four uprights, B, which guide the cross-head C in its up-and-down motion. It must be remarked, however, that the beams B, instead of extending upward, might be made to extend in a lateral direction from the frame A, and in this case the press-boxes would have to be placed on the sides, or the frame, instead of being placed in a horizontal position, might be placed in a vertical position, and I do not wish to confine myself in this respect to the precise position shown in the drawings. Motion is imparted to the crosshead C by a screw, or by a block and fall, or by any other suitable mechanical contrivance, and said cross-head connects by toggle-arm D with the two inner followers, E E', as clearly shown in Fig. 1 of the drawings. The fol-

lower E connects by rods a with a slide, f', which carries the follower F', and in the same manner the follower E' connects by rods a'with the slide f which carries the follower F, and as the cross-head descends the followers E and E' move in the directions of the arrows marked on them in Fig. 1 of the drawings. The motion of the follower E is transmitted to the follower F', and that of the follower E' to the follower F, and any substance or material placed between the followers E and F and the followers E' and F', respectively, is compressed with great force. The several followers move in suitable guides on the sides of the pressboxes G G', which are intended to receive the material to be pressed, and the slides to which the outer followers, F F', are secured straddle the inner followers, E E', as clearly shown in Fig. 2 of the drawings. The rods a a', which connect the slides with said inner followers, are rigidly connected at one end to the followers and at the other to lugs or brackets b b', which are fastened by screws, or in any other suitable manner, to the inner ends of the slides. When the press is in operation and the followers are moved toward each other, the rods a a' are exposed to a strain the tendency of which is to tear the same asunder, and which consequently is opposed by the absolute strength of the rods. Unless the strain exceeds this absolute strength, the followers  $\mathbf{F}'$ F are compelled to move with the followers E E', and the material in the press-boxes is compressed with great power. By means of this press two bales of cotton, hay, or other material can be formed and pressed simultaneously in the same time which is consumed in ordinary presses in pressing one bale, and the construction of the press is simple, strong, and durable. I claim as new and desire to secure by Letters Patent---The followers E E', connected by rods or other equivalent means to followers F F', and operating in combination with the cross-head C and toggle-arms D, in the manner and for the purpose substantially as set forth.

JOHN H. FELLOWS.

Witnesses: WM. ADAMS, T. HOLM.