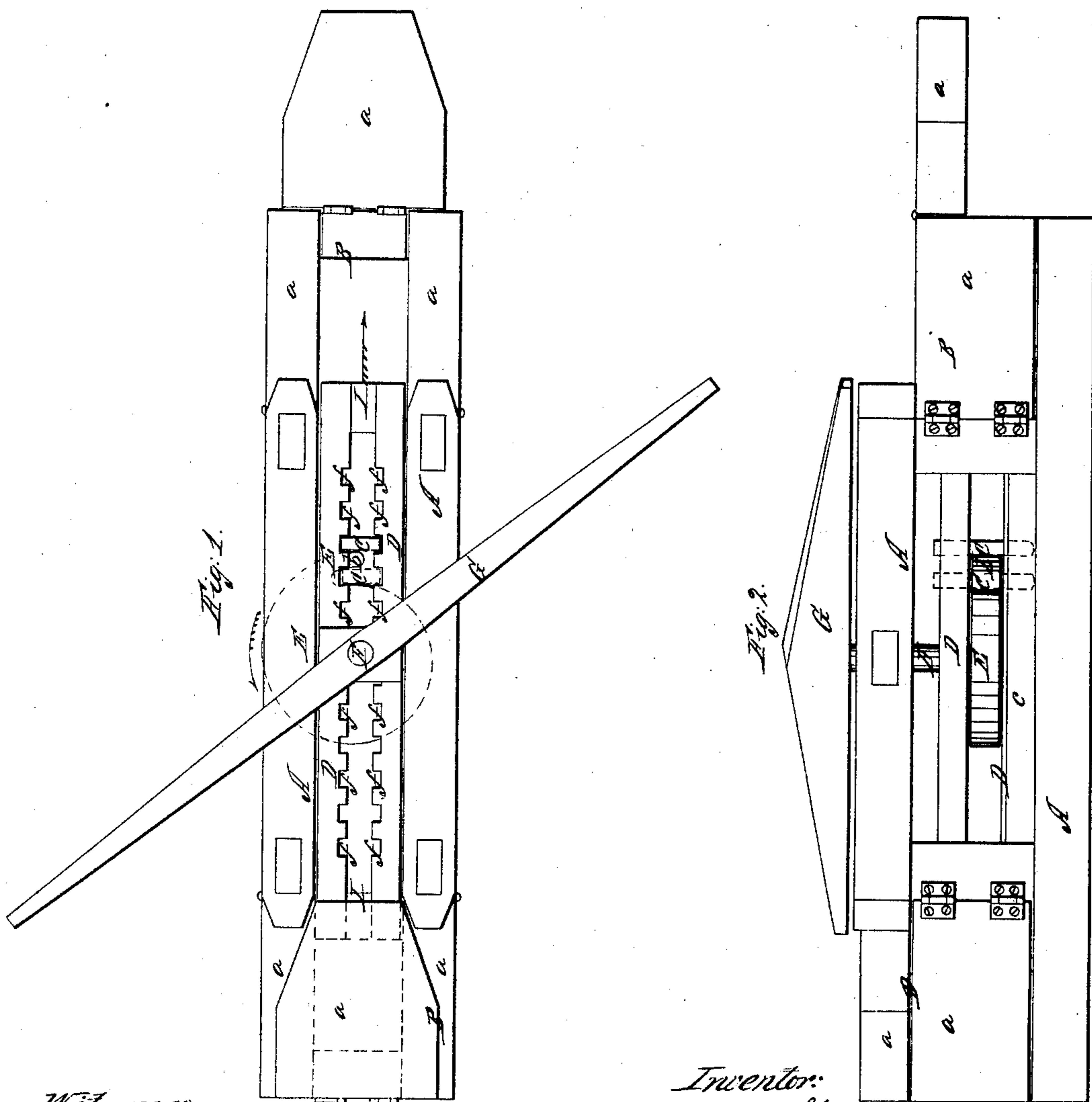


*T. H. McCray,*

*Hay Press.*

*N<sup>o</sup> 26,855.*

*Patented Jan. 17, 1860.*



*Witnesses:*

*R. F. Osgood  
C. K. Smith*

*Inventor:*

*Thos. H. McCray,  
By his attorney  
J. S. Brown.*

# UNITED STATES PATENT OFFICE.

THOMAS H. McCRAY, OF TELLICO, TEXAS.

## IMPROVEMENT IN PRESSES.

Specification forming part of Letters Patent No. 26,855, dated January 17, 1860.

*To all whom it may concern:*

Be it known that I, THOMAS H. McCRAY, of Tellico, in the county of Ellis and State of Texas, have invented a new and Improved Press for Pressing Cotton, Hay, Tobacco, and other Similar Materials; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a plan of the machine as arranged for pressing cotton and hay; Fig. 2, a side elevation thereof.

Like letters designate corresponding parts in both figures.

The parts are mounted in an oblong frame, A, at each end of which is a box, B, in which the material is pressed and baled, the cover and sides *a a* thereof being arranged in the usual manner. A cam, E, is rigidly secured to a vertical spindle, F, in the center of the frame, and driven by a sweep, G, as usual. The periphery of this cam extends through the entire circle, the eccentricity being uniform from the inner to the outer extremity, more or less, according to the power required to be applied. The outer extremity, *b*, also projects around the inner extremity sufficiently far to leave an open space between it and the inner extremity to admit a key or block, C, as hereinafter set forth. The followers I I, for both bale-boxes, are situated between suitable guides, *c c*, to retain them in place, and are connected by means of four parallel bars or timbers, D D D D, the upper pair being separated from the lower sufficiently to admit the cam E between them, and the two side pairs being separated sufficiently to admit the spindle F between them. These bars or timbers are of such length that the followers may act alternately, as will presently be described. In the inner side of the bars D D D D are made sets of vertical notches *ffff*, Fig. 1, sufficient in number for the purpose designed, and the notches of different bars in each set, respectively, are opposite to each other. These sets of notches are situated apart a distance equal to the throw of the cam E at each revolution. A removable key or block, C, fits into any one

of these sets of notches *ffff*, as shown most clearly in Fig. 1, for the cam to act against.

The action of the whole arrangement is as follows: The key C is first inserted in one of the sets of notches *ffff*, close to the inner extremity of the cam, which is then put in motion and forces the follower forward a distance equal to its throw or eccentricity. Then, just before the outer extremity, *b*, of the cam escapes from the said key, another key or block (shown in red lines) is inserted in the next succeeding notches *ffff*, in front of the inner extremity of the cam, which then commences to act on it, and performs another revolution. The first or another key is then inserted in the same manner behind the second, and thus the operation is repeated at each revolution of the cam till the bale is sufficiently pressed. As soon as one bale is pressed and secured, the keys C C are shifted to the other side of the spindle and a bale is pressed in the other bale-box in the same manner, so that while one bale is pressing the empty box is filling. Thus, by the use of the keys C C, removable to the different sets of notches *ffff* in succession, in connection with the cam E, thereby giving as many turns to the cam as desired to press a single bale, I am enabled to press the bales with a much less power than would be required to press them if the pressing were completed by a single revolution of the cam, as in other cam-presses.

I do not claim a revolving cam for pressing cotton or other substances; but

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

The combination of the keys C C, or their equivalents, movable to different notches or positions in succession, with a revolving cam, substantially in the manner and for the purposes herein specified.

In witness that the above is a true specification of my improved hay, cotton, and tobacco press I hereunto set my hand.

THOMAS H. McCRAY.

Witnesses:

JOHN A. MOODY,  
C. L. PICKENS.