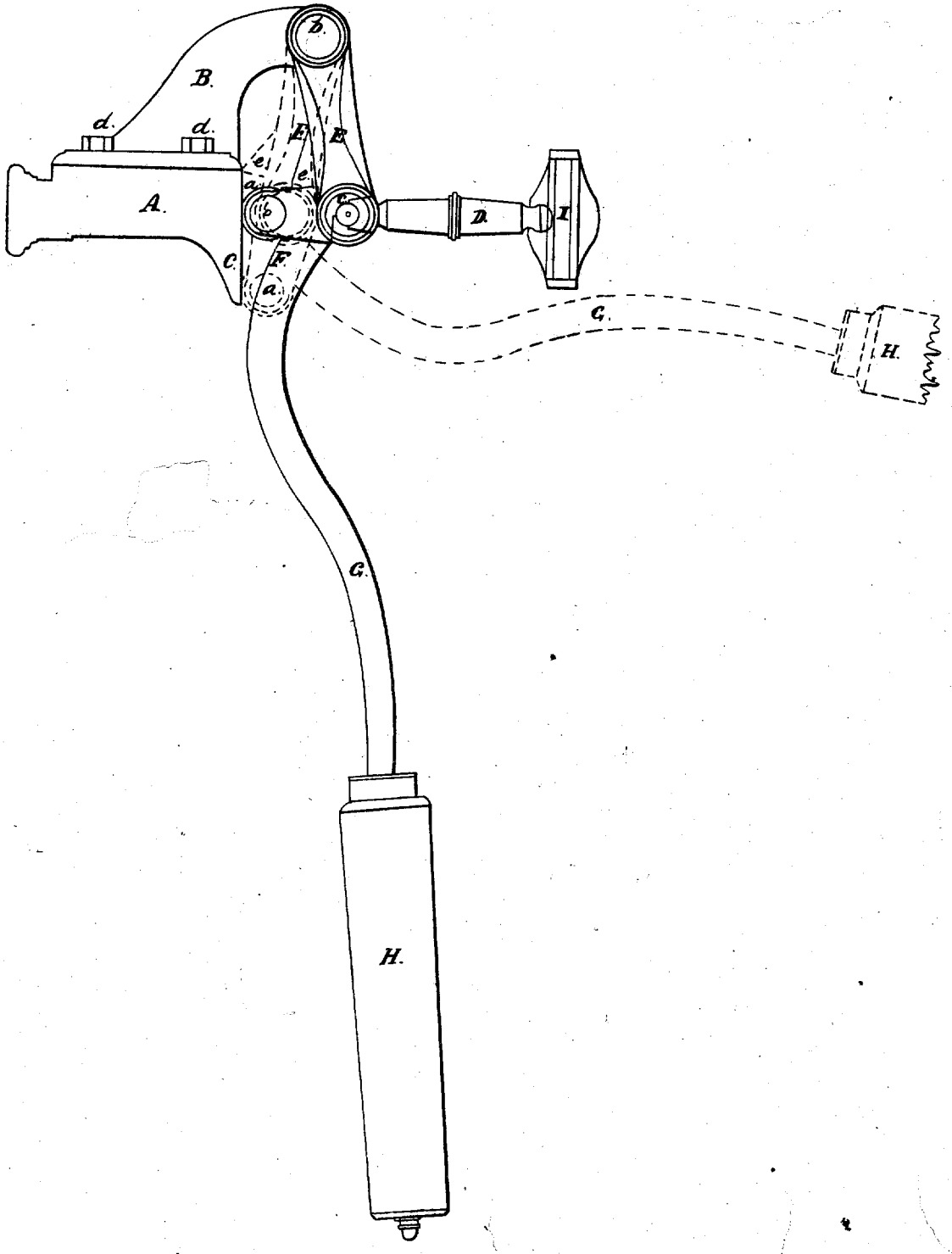
O. Tufts. Sheet 1. 2 Sheets.

Hand Printg Press.

No. 6679X

Patented Jul. 30. 1831.

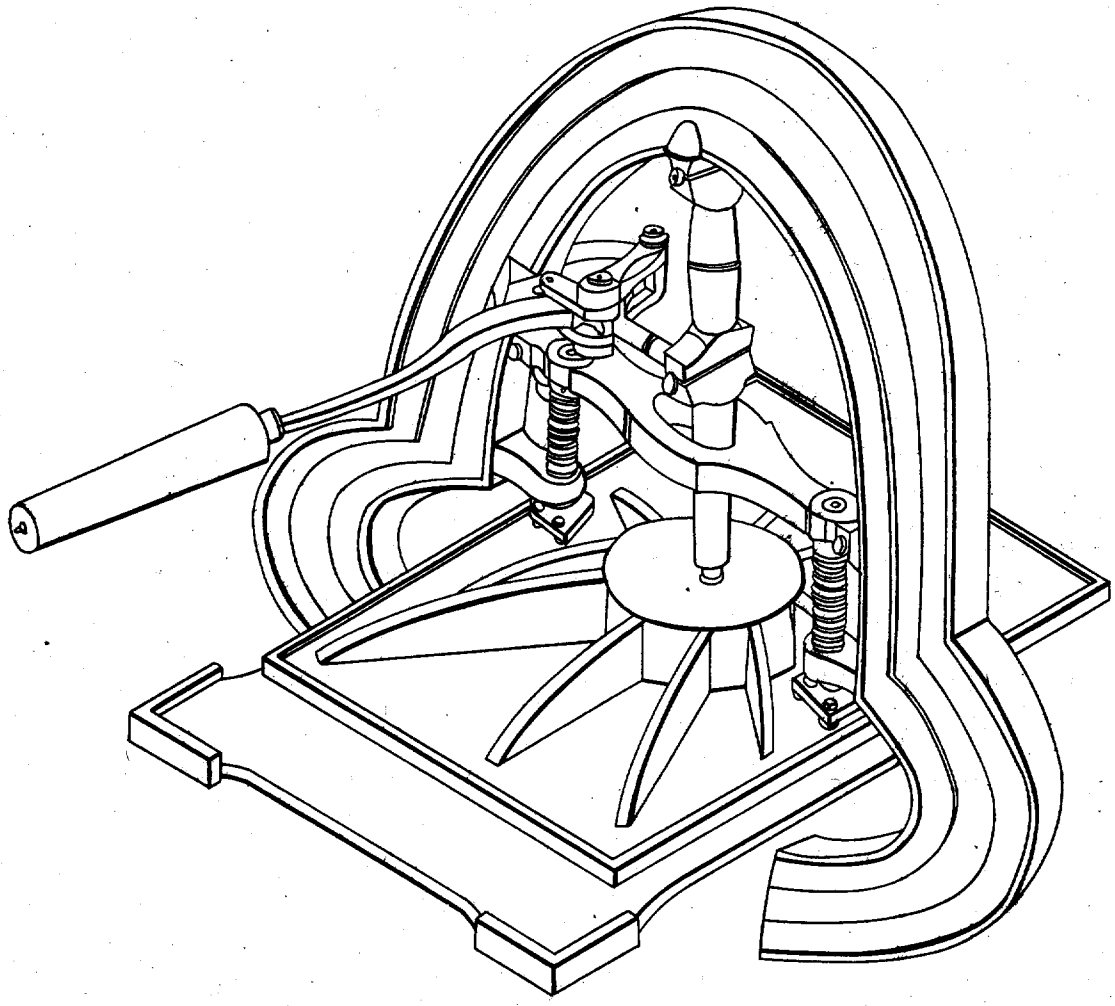


O. Tufts. Sheet 2. 2 Sheets

Hand Printg Press

No. 6679X

Patented Jul. 30. 1831.



Otis Tufts

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Otis Tufts himself of his improvement in the Pressing Press. Be all persons to whom these presents shall come Otis Tufts of the City of Boston in the County of Suffolk & Commonwealth of Massachusetts (Mechanician hereinafter Greeting). Be it known that I the said Otis Tufts have invented construction made and applied to use a new and useful improvement in the machine called the Rocking Press. My improvement consists of a combination of machinery in a manner not hitherto used for the purpose of straightening the progressive or toggle jointed lever by an easy and nearly uniform pull. The machinery is simple and wears with little friction or friction. The power the pressman is nearly in a right-line with the motion of the progressive or toggle jointed lever on which it operates to give the progression, and while the working lever is moved by a strength best adapted to the power and convenience of the operator, the power at the point of the progression may be of almost any desired degree. I use the frame, bed-plate, platen, progressive or toggle jointed lever, and spiral springs nearly in the common manner in which the same are used in presses generally. My combination which is for the purpose of drawing the platen or the progressive lever to make it straight, employs only the working or hand lever, the platen or drawing lever, the fulcrum axle, and the other apparatus by which the platen is made to bear upon the progressive lever. Every part of the machinery, I use, has been before used, separately, & for other purposes, but the combination I claim as new, & constitutes my invention. & it may be conveniently employed

Specification of Otis Tufts

employed instead of the existing machinery to produce the impression in the leather used. My improvement is represented on the drawing or plate which accompany this specification and are made a part of it. Plate I is a transparent drawing of so much of the printing frame or press with the platen, bed-plate & other machinery as is necessary to exhibit & explain my invention and this is drawn on a scale of one inch & half to a foot: Plate No 2. is a section, plan or elevation of one side of the frame and of the machinery and its combination which constitutes my invention, and this is drawn on a scale of three inches to the foot. In this plan the red lines represent the bevel cams the friction rollers a. the shank E the joint c, and the bar B, in that position before the pull is commenced and the black lines represent them when the pull is finished at the point when the impression is completed.

This plan represents the whole of my invention which is described as follows: A. represents a section of one side of the common frame of the printing press to wit, the side by which the operator stands: and is thus represented as the most convenient mode of showing how my combination of machinery is connected with it. B. represents an arm of cast iron or other substance fastened on to the side of the frame, on the back side of it, and even with the section A. by four screws, of which two by the upper side of the arm are shown at d. d. and the two others are below them near the lower side of the arm and not visible in the figure. This arm must be of sufficient depth & thickness to form a bearing at the joint b sufficient to sustain the operation of the machinery. C. represents a piece of cast iron or other substance, which can be made of any desired form & fastened on to the side of the frame of which a section is represented at A. The use of this is to form a bearing or elevation for and in addition to the shaft which the frame for

for the friction rollers a a. In the Machine shown in the drawing which is represented on the plane, I make this projection to form the space for the friction rollers across the frame as a plane, and this will probably be found the most convenient form. But I have caused that surface to be curved in my specification, by its being curved either way on the projecting part or across the frame, in the whole course that the friction rollers may proceed on a plane or on a curve, varying in any and every desired manner as experience in the casting of the operation may require, to render the pull uniformly equal or to adapt the required strength in the best possible manner to the efforts of the operator. D represents the pitman or driving lever which bears upon the progressive lever. This pitman lever or bar has nothing novel in its formation. But in my combination it is drawn on to the progressive lever nearly in a right line with its motion while it progresses to effect the impression, and in this consists one of the advantages of my invention. E represents a strong bar or link proceeding from the joint b to the joint c. F is a shank or extension of the working lever, turning nearly at right angles from the handle part of it at the moving joint b, and receiving at the end of it the friction rollers a a. G is the working lever made of wrought iron or other suitable substance. H is a piece of Mahogany or other wood on the end of the working lever of a suitable size for the operators hand. I is a part of the lower division of the progressive lever, with a socket to receive the end of the pitman. At the upper part of the piece I, is the toggle joint of the progressive lever. c represents the friction rollers being moved by the motion of the working lever it proceeds on the plane or other surface below described, it progresses the joint c. d gives motion to the pitman which is connected with the joint c. b represents a stationary joint at

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at the end of the arm B. which receives and sustains the bar E. c. is another and a moving joint which connects the end of the bar E with the working lever at the point where the shank F commences. By means of this combination when the working lever is moved from its place of rest as represented by the red lines to the point where the pull is finished as represented by the black lines the fixation will be moved from its place as seen in the red lines, to the place shown in the black lines, and this gives the whole desired motion to the pitman and completes the impression. d. d. represents two of the screws by which the arm B is secured on to the section of the frame A. e represents a triangular piece cast on to or otherwise secured to the side of the bar E next to the arm B. So use is to terminate the pull at the desired point and also to check the power and operation of the springs which raise the platen. In testimony that the above is a true specification of my said invention or improvement as above described I have hereunto set my hand & seal this ninth day of July in the year of our Lord one thousand eight hundred and thirty one.

Otis Tufts

Witnesses
Hugh McCulloch
Nicholas Peabody

Enrolled