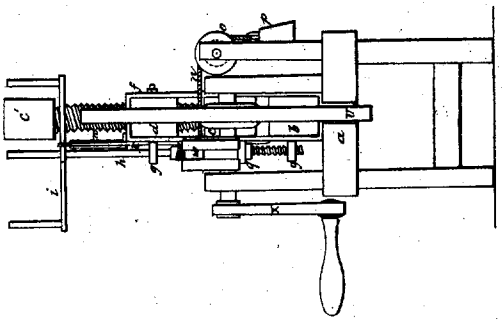
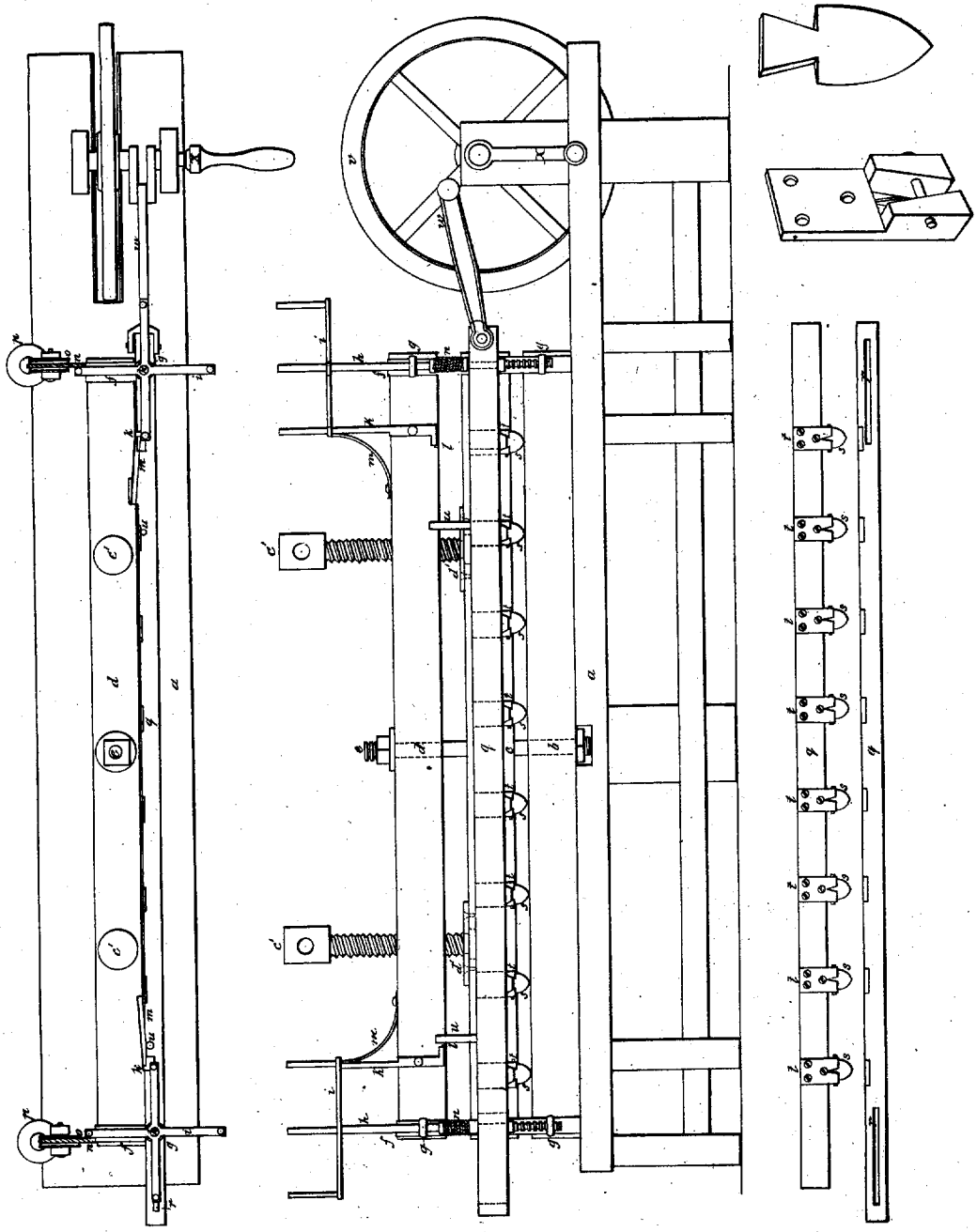
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J. Bateman.

Book Cutting.

No 4 Patented Mar: 12, 1834.





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or 3

Mar. 12. 1834 319.

Jonas Bateman
Letters Patent

The Schedule referred to in these Letters Patent and Making part of the same containing a description in the words of the said Jonas Bateman himself of his improvement in the machine for cutting or trimming the edges of Books or Paper.

To all to whom these Presents shall come

Be it known that I Jonas Bateman of Harvard in the county of Worcester & Commonwealth of Massachusetts have invented a machine or a new & useful improvement in the art or business of cutting or trimming the edges of Books & paper & that the following is a full & exact description of the construction & operation of the said machine as invented & improved by me to wit. Said machine consists of three bars made of hard wood eight feet in length & six inches square placed perpendicularly one above the other the lower one resting on a bench or platform & confined thereto by bolts, nuts & screws. The upper bar is confined to the lower bar by plates of iron half an inch in thickness two inches wide & two feet in length placed on the outside of the bars near their ends and sunk their thickness into the bars & made fast by bolts & screws at a proper distance from the ends of said bars. this part of the machine is called the press. The middle bar called the follower plays up & down between the upper & lower bars with tenons at the ends so as to play between the plates of iron confining the upper & lower bars together In the centre of the bars an half inch iron bolt passes through all the bars with a head at the bottom and fastened at top by a nut & screw to prevent the upper & lower bars from springing when in operation. On the middle bar at equal distances from the centre & ends are placed two iron plate fastened on with screws. The the upper bar at corresponding distances with said plates press two screws either wood or iron upon said plates & confined thereto by bolts with heads under side of the plates so as move the said

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dle bar a follower up or down by turning the screws one way or the other. These screws serve to confine the books or paper between the lower & middle bars so as to be operated upon. Thro the upper & lower bars one inch from the ends pass in an horizontal direction four three fourth inch iron bolts with an eye in each three fourths of an inch in diameter & screws cut in the eyes of the lower ones - said bolts are confined on the opposite side of the bars with nuts & screws. In the eyes of these bolts moves two turned iron perpendicular shafts with a screw cut six inches on the lower ends up to the lower bearings & corresponding with the screws cut in the eyes of the bolts. These shafts are two feet six inches in length. The lower bearings are three fourths of an inch in length & an inch & an half in diameter, the shafts are then turned down to three fourths of an inch in diameter & four inches in length to play in slits of the bar in which are confined the knives. the upper bearings of the shafts are five inches in length & one and an half inch in diameter the shafts are then to their tops turned to three fourths of an inch diameter On the top of each shaft is a cross made of half an inch square iron with arms nine inch - a long & a right angled elbow nine inches from the centre six inches in length turned up on one of said arms. Said cross es are rivetted on to the shafts & move round with the shafts in an horizontal direction. On the upper bar on the side where said shafts are two other perpendicular shafts made of half inch iron fourteen inches long are attached to said bar nine inches distant from the centre of the large shafts by a screw passing thro said shafts & the centre of the bar. These shafts are flat where they come against the bar & round when they come above the bar & so fastened by the screw as to admit of small longitudinal motion. The lower ends of these shafts are parallel with the under side of the bar & then form a right angle, elbow towards the centre of the machine of an inch in length a small pin near the bottom of the bar prevents the bottoms of these shafts moving towards the centre of the ma-

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chine. On the top of the upper bar & the same side with the last described shafts are attached two steel springs nine inches in length upon a quarter circle & the tops resting against said last described shafts so as to intercept the motion of the crosses by coming in contact with the arms. On the upper bearings of the two large perpendicular shafts are attached cords passing horizontally to the opposite side on to a pully & block & to the ends of said cords are attached weights which cause the pressure of the knives downwards when the machine is in operation. The bar which contains the knives is nine feet two inches long two and an half inches thick & four inches in depth with central perpendicular slits or mortises three fourths of an inch in width at each end said slits or mortises are a foot at one end & a foot & two inches at the wheel end. These slits play backwards & forwards upon the large perpendicular shafts & keep the bar containing the knives steady in its place when the machine is in motion. On the last mentioned bar or slide are fixed eight knives made in the fashion of those commonly used placed at one foot distance from each other beginning one foot from the opposite end containing the wheel. The knives are dove tailed into the sockets with slits in the sockets up to the bar or slide. The sockets are let into the bar or slide on the side next the press so as to form an even surface & fastened by screws. In that part of the sockets with slits below the bar a small bolt passes through one half & enters a screw in the other half so as to confine the knives tight in their places. On the upper part of the bar or slide containing the knives is an iron pin six inches long which by coming in contact with the lower end of the shafts fastened to the upper bar extends the upper part of said shafts against the springs towards the centre so as to permit one arm of the cogtles on the large shafts to pass which lowers the bar containing the knives. At eighteen inches distance from one end of the press two posts twelve inches in height with sockets for a crank to turn in sufficiently braced steadily to carry a cast iron wheel upon the crank thereof

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feet in diameter & weighing one hundred pounds & runs partly in a mortise cut into the bench or platform are erected on the side on which the crank is turned & is so bent as to form a sweep of six inches to which a reach or fetch fastened to a bolt in the bar or slide containing the knives also fastened by a socket. The crank is further so bent as to form another sweep of a foot at the handle taken hold of to turn it. By means of the connexion of the reach or fetch with the shaft of the crank & the bar or slide containing the knives to move in an horizontal direction alternately one foot each way at every revolution of the wheel & at each alternate movement the bar by means of the shafts & springs cords weights & screws is lowered & pressed down upon the book or paper to be cut or trimmed by the knives. These machines may be made on a larger or smaller scale than the one above described & with a greater or lesser number of knives & they may be operated with by manual water or other power. The principles of this machine of which the said Jonas Bateman claims to be the inventor or discoverer are the simultaneous use of so many knives & brought to bear upon the books or paper to be cut or trimmed by turning the balance wheel & the consequent operation of the weights, shafts, screws & springs above described

Witnesses
Moses Smith
John Huntington

Jonas Bateman

Cert.
WC.

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