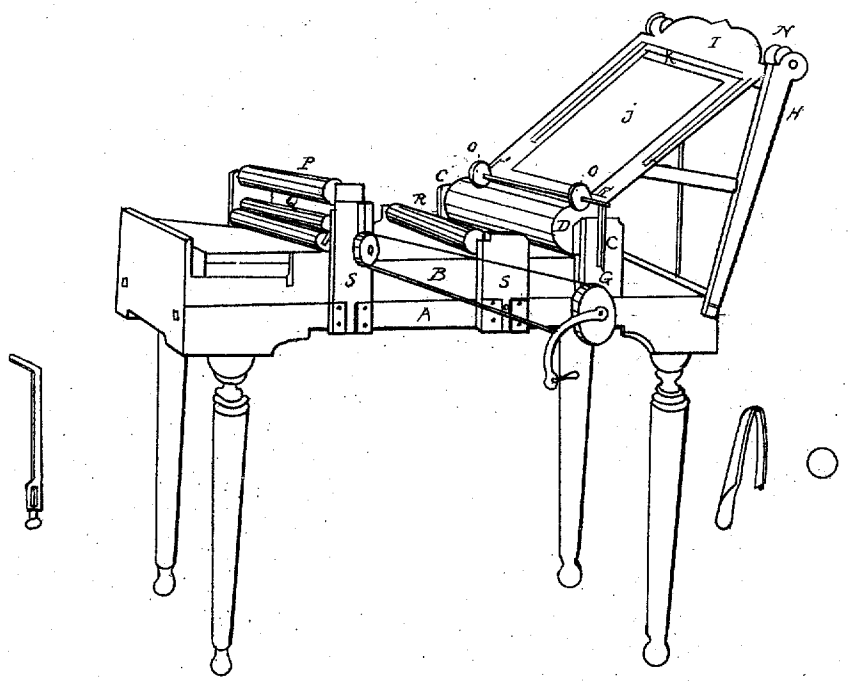
9467X

H. Camp.
Printing Press.

No. 4

Patented Mar. 4. 1836



9467X

March 14. 1836

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1.

Hezekiah Camp.

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 Hezekiah Camp himself of his improvement in the Printing Press.

To all to whom these presents shall come: Be it known that I Hezekiah Camp of Canton, Tuscarawas County and State of Ohio, have invented a new and useful improvement in the Printing Press, called Camp's (Columbian) Impression Press: and that the following is a full and exact description thereof. First I construct a rectangular frame A of any size desired, and of sufficient height to admit the convenience of the operator, and support it by four posts. The sides of the frame to be ploughed or grooved on the top frame and bed, to admit of the ends of the bed B. to be placed therein. In these grooves are to be inserted metal bearings or hollow rollers which the ends of the bed B are to turn in. I construct a moveable bed B, similar to that of the common printing press, and moved in the same manner, by a crank pully and straps. An additional pully may be used, and the crank placed to the left hand of the operator in order to accomodate his habitual motions. In this case the two pullies are to be connected by additional straps. The bed may be made of wood, wrought or cast iron; I then construct two side plates C. to be fastened to the frame A about one fourth of the distance of the length of the frame from the right hand end of said frame one on each side of sufficient size to contain the journals of the press roller D. and the hooks E. which confine the press roller D. down to printing point and the springs F. which raise the roller and keep it up while the form passes back after the impression is taken. The press roller D. may be made of wood or metal size not material and covered with cloth. The journals pass through the side plates C. . . . playing up and down a space of an inch or more and resting upon the springs F. of metal hook E. is let into each side plate C. the upper end containing a slot to admit the journal of the press roller with a sliding box and adjusting screw. The lower

end of the hooks being formed in an angle of about 75 degrees and turned towards the left end of the bed with a circular notch on the inside corner of the angle to fit a pin or bolt which is to be fastened into the frame of, which bolts form the journals of the rolling y. immediately under the projection D. and on which the bed B. runs. The hooks C connect the journals of the rolling y. with the journals of the press roller S. and serve as a guide to confine the press roller during the operation of printing to the proper point to make the impression and are fastened at the lower ends by means of pins projecting out of the sides of the bed B near the left hand end of the bed. These pins on the bed is carried forward till the impression is fully made. Like the hooks near the lower end and unfasten them from the bolts or journals of the rollers and the springs F at the same instant raise the roller S about a fourth of an inch and continue it while the bed and frame are running back. near the other end of the bed are two similar pins, which as the bed returns slide the hooks on the opposite side and fasten or lock them upon the bolts as before, thereby bringing the press roller down to printing point. Next construct two upright pieces H. fastened to the right hand end of the frame & to support the upper end of the platform i. which is made of wood and placed at an angle of about 40 degrees to the frame. the lower end resting upon the upper ends of the side pieces C. said platform must be of sufficient size to accommodate the length and breadth of the sheet to be printed. Next make a flexible tympan of thin leather, linen cloth or some other suitable material as large as the sheet to be printed requires. the lower end of which is to be fastened to the right hand end of the bed B. the other end of the tympan is brought under the projection d. and laid upon the platform i. at the upper end of the tympan attach clamps k. to hold the upper end of the sheet. They are kept together by a spring catch and are opened by a point attached to the platform passing in between them and receding off the catch. as they come in contact. Another spring is placed between the clamps to throw them open when released from the spring catch near the other end of the tympan are other clamps to hold the other end of the sheet. they are kept together by a spring catch at each end and project about one half inch beyond the sides of the tympan, to and with a sharp edged formed pieces (written)

are attached to the platform) to pass in between them remove the spring catches and force them open as they come in contact with them pieces. The upper ends of the pieces 16. support a shaft 15. containing two grooved pullies as far apart as the tympan is wide, and exactly opposite the upper corners of the tympan. To these corners of said tympan are the ends of cords attached the other ends of said cords are fastened to the pullies — The cords being wound upon these pullies another pully is attached to one of the outer ends of the same shaft with a weight suspended from it by means of another cord (so that when the tympan is carried down in the operation of printing the weight is drawn up, and when the tympan is permitted to return, the weight runs down (and being sufficiently heavy) carries the tympan together with the printed sheet back upon the platform to its original position. The rollers 8, are suspended over the lower end of the platform by means of a wire shaft attached to the journals of the press rollers, the object of these rollers is to shed the lower clamps. Inking may be performed in the usual way or by one or more distributing rollers in the end of the frame on which the bed moves, turned by a disk or crank fully attached to one of the distributers, and a round cord fully attached to the same shaft. The inking roller being confined in a stock is placed upon the distributers and the moving of the bed back in motion the rollers by which means the distribution of the ink is produced. Inking may be performed by a supplying roller in with distributers placed in such a position as to ink the type by the motion of the bed (as represented in the drawing) thus precluding the necessity of a person to ink. Mode of operation — first the form on the bed in the usual manner. Inking may be performed in the usual manner, or as above described or represented in the drawing. Place the sheet upon the tympan in the usual manner which is confined at each end and by shutting the clamps. Then by turning the crank the form is forced under the press roller, the tympan and paper being carried under at the same time. The impression is made and as soon as this is performed the press roller through, and

the crank being turned back the form rollers, and the tympan and printed sheet are at the same time carried back from the platforms, and the clamps flyp open leaving the sheet ready to be taken off. What I claim as my own invention and not previously known in the above described machine, is the principle of throwing the impression roller in and out of gear by means of the hooks or otherwise and of the manner of raising the press roller and keeping it suspended while the form runs back, thereby preventing the impression from being injured— also a flexible tympan & self opening clamps, and all other necessary appendages thereto belonging as above described.

Witnesses Hezekiah Camp

Sam Stillwell
L. L. Beck

(Model)

(Granted March 4. 1836.)