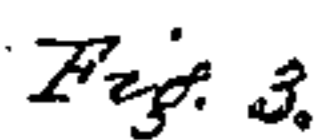


$N^{\circ} 16718.$

*Patented Mar. 3. 1857*



# UNITED STATES PATENT OFFICE.

NATHAN. L. CHAMBERLIN, OF WEST ROXBURY, MASSACHUSETTS.

## HAND PRINTING-PRESS.

Specification of Letters Patent No. 16,718, dated March 3, 1857.

*To all whom it may concern:*

Be it known that I, N. L. CHAMBERLIN, of West Roxbury, in the county of Norfolk and State of Massachusetts, have invented a certain new and useful Hand Printing-Press, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

10 Figure 1, is a perspective view of my improved press. Fig. 2, an end view of the same. Fig. 3, detail which will be referred to hereafter.

15 In presses of this class it has been found difficult to obtain a uniform impression from the fact that the form from which the impression is taken, often varies a little in thickness on different sides, this may arise from unevenness of the block on which the 20 stereotype plate is secured or from other causes.

To obviate this and to give a fair impression even when the form is slightly uneven or varies in thickness is the object of my 25 present invention.

To enable others skilled in the art to understand and use my invention I will proceed to describe the manner in which I have carried out the same.

30 In the drawings A, is the bed of the press, on which is laid (or may be secured) the block B, to which is attached the stereotype plate C, from which the impression is to be printed (where types are used the form may 35 be secured to or placed upon A, in a similar manner).

D, is the tympan which is hinged to A, at *a*.

40 E, is the impression roll the journals of which run in suitable bearings in the frame G, which is secured at the middle of its length to a round rod H which slides longitudinally and also turns on its axis in sleeves or bearings *b*, *c*, attached to an upright 45 frame I, which is secured to one side of the bed A, in the following manner: From one side of the bed projects the piece K, in which is formed a suitable slot to receive the up-

right I which is pivoted to it near one side at *d*, the other side being allowed to move 50 vertically in its slot, and is adjusted and secured by means of the pin *e*, which passes through K, and I. This pin has a head *f*, by which to turn it, and a stem *e* Fig. 3, which is cut away on one side forming an ec- 55 centric by turning which the outer side of the upright I, may be slightly raised or depressed varying the line of motion of the rod H. The pin is secured after adjustment by a nut on the opposite end. To the upper 60 side of the frame G, is attached the handle L, by which the roll is moved back and forth.

The operation is as follows: The form having been inked, the sheet of paper or 65 other article to receive the impression is laid thereon, the tympan D, is then brought down, and by means of the handle L, the roll E, is drawn across it the rod H, sliding through its sockets, the button or stop *g*, 70 preventing it from being drawn through them.

It is evident that by the above arrangement of parts the roll E, can accommodate itself to any inequalities of height of the 75 ends of the form while by raising or depressing the outer end of the upright I, the requisite amount of pressure may be put upon the roll to suit the height and size of the form, and thickness and texture of paper 80 used.

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

1. The method herein described of hanging and balancing the impression roll for 85 the purpose set forth.

2. The method substantially as herein set forth of adjusting the impression roll to increase or diminish the pressure given and adapt it to the size of the form and the 90 height of the type or block.

NATHANIEL L. CHAMBERLIN.

Witnesses:

THOS. R. ROACH,

P. E. TESCHEMACHER.