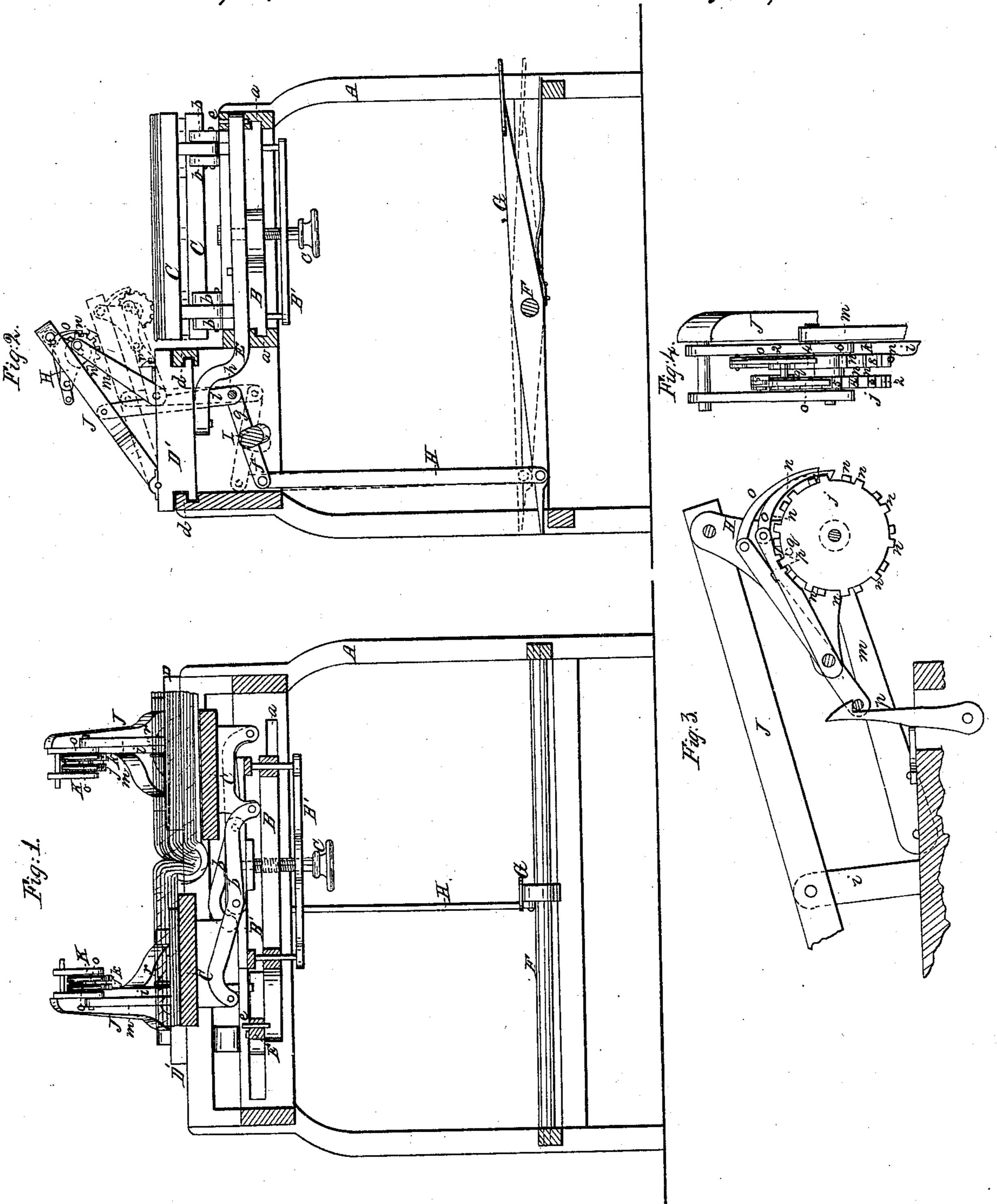
C. Leverich. Book Paging Mach. Nº 12954. Patented May 29.1855.



UNITED STATES PATENT OFFICE.

GABRIEL LEVERICH, OF WELLSBURGH, NEW YORK.

APPARATUS FOR PAGING BOOKS.

Specification of Letters Patent No. 12,954, dated May 29, 1855.

To all whom it may concern:

Be it known that I, Gabriel Leverich, of Wellsburgh, in the county of Chemung and State of New York, have invented a new and Improved Machine for Paging Blank Books or Printing the Numbers of the Pages Thereon; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a front view of my improvement the front end of the frame being removed. Fig. 2, is a side view of ditto, the side of the frame nearest the eye being removed. Fig. 3, is a detached side view of the type wheels and the mechanism by which they are operated. Fig. 4 is a front view of

ditto.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a new and improved machine for paging blank books, and consists in placing type figures upon the peripheries of wheels which are arranged and operated in a peculiar manner as will be presently shown, in combination with adjustable platforms on which the book to be paged is placed, and by which the pages will be at all times properly presented to the type.

A, represents a suitable frame on the upper part of which a horizontal slide B, is fitted in grooves (a) so that said slide B, may be moved laterally either to the right or

left. See Figs. 1 and 2.

To the slide B, there are attached two frames B', one above and one below the slide B, and to these frames levers (b) are 40 attached, two at the front, and two at the back edges of the frame B. And to the ends of these levers platforms C, C, are atached of a suitable size to support the book to be paged, the sides of the book resting 45 upon the platforms as shown in red, Fig. 1. The levers are so arranged that when one platform is depressed the other will be elevated in a corresponding degree, and the levers and platforms may be raised or low-50 ered bodily by operating a thumb screw (c)which passes through the two frames B', and through the slide B.

On the upper part of the frame A, and at the back ends of the platforms C, C, there are placed bed pieces D, D', one of which D, is permanently secured to the frame.

The other D', is fitted in grooves (d) in the frame A, and is allowed to slide therein laterly, see Fig. 2. The bed piece D', is connected to the slide B, by a lever E, having 60 its fulcrum at (e) in the frame A, see Fig. 2. On the lower part of the frame A, there is hung a shaft F, having a spring lever or treadle G, attached to it. To the back end of the treadle an upright rod H, is attached, 65 the upper end of said rod being connected to an arm (f) on a shaft I, at the upper part of the frame A. There are also two arms (g) attached to the shaft I, the ends of the arms being connected by a rod (h), on which 70 rod (h) the lower end of a bar (i) works. And the upper end of said bar is connected to a lever J, the lower end of which is jointed to the upper surface of the bed D'. To the outer or upper end of the lever J, there 75 is attached a small swinging frame K, having two wheels (j) (k) working on an axis within the frame. And to this frame there is connected a lever (m) the lower end of which is also connected by a joint or pivot 80 to the upper surface of the bed piece D'. There are two levers J, one over each platform C, both are constructed alike and provided with wheels, as above described.

To the peripheries of the wheels (j) (k) 85 there are attached radially, type figures (n)as shown clearly in Fig. 4. To one of the wheels at the right side of the machine, the even figures are attached 2, 4, 6, 8, and the cipher 0. To the adjoining wheel the nine 90 digits are attached successively 1, 2, 3, etc. Within the swinging frames there are attached pawls (o) (o) which catch into the recesses or spaces between the type as shown more particularly in Figs. 3 and 4. The 95 pawl which acts upon the type wheel, having the types of the nine digits attached, is provided with a small inclined projection (p) shown by dotted lines in Fig. 3. And the type wheel having the even type Figs. 100 2, 4, 6, etc. upon it has a small \bar{p} in (q)attached to it which acts against the projection (p) at certain times as will presently be explained. To the upper surface of the bed piece D, there is attached a spring 105 catch (r) as shown in Figs. 2 and 3. The type wheels at the left side of the frame are also provided with pawls and arranged as the one above described with the exception that one of the wheels have the uneven 110 type figures attached 1, 3, 5, etc.

The operation is extremely simple and

will be readily understood. The book to be paged is opened and placed upon the platforms c, c, and the platforms are adjusted the requisite height by operating the screw 5 (c). The type wheels are inked in any proper manner by means of ink rollers properly arranged. And the outer end of the treadle G, is depressed by the foot and the type wheels are forced downward upon 10 the corners of the pages, the type wheel (k) at the left side of the machine having the uneven numbers upon it printing the figure 1, on page 1, and the wheel (k) at the right side of the machine having the 15 even numbers printing the figure 2 on page 2. The foot is then withdrawn from the treadle, a leaf of the book turned and the treadle again depressed and as the levers J, descend the spring catches (r) will hook 20 over small pins at the end of the pawls (0) of the wheels above mentioned, and cause said wheels to be turned the distance of two type and the following pages, 3 and 4, will be lettered and the operation is thus pro-25 ceeded with till the ninth page is printed and then the projections (q) on the wheels above described act against the inclined projections (p) on the pawls of the adjoining type wheels (j) and cause said wheels 30 to be turned so as to bring the figure 1, in the proper position, to be printed by the side of the figures on the wheels (k) previously described thus 10, 11, 12, etc., and this is proceeded with till the 19th page is lettered, 35 and the wheels are again turned the dis-

tance of one type, to bring the figure 2, in proper place to print 20, 21, 22, etc. The wheels (k) printing the units, and the wheels (j) the tens, and if a third wheel is employed it would print hundreds.

Any number of type wheels may be used, two as herein shown are sufficient for a book with less than 100 pages, three wheels would be required for any number of pages less

than 1000, and so on.

The adjustable platforms c, c, compensate for the unequal heights of the two sides of the book, see Fig. 1. The two sides would only be of equal height at the middle of the book, when an equal number of leaves 50 would be at each side. The platforms by moving the slide B, may be brought in the proper relative position with the type wheels, so that the center of the book may always be kept midway between the two 55 platforms whatever its size may be.

I do not claim simply placing type on the periphery of a rotating wheel for the purpose of printing, for that has been previously done in machines termed mechani- 60

cal typographers but

What I do claim as new and desire to se-

cure by Letters Patent, is,

In combination with the type wheels, the adjustable platforms c, c, for the purposes 65 as set forth.

GABRIEL LEVERICH.

Witnesses:

S. LEVERICH, W. M. DEAN.