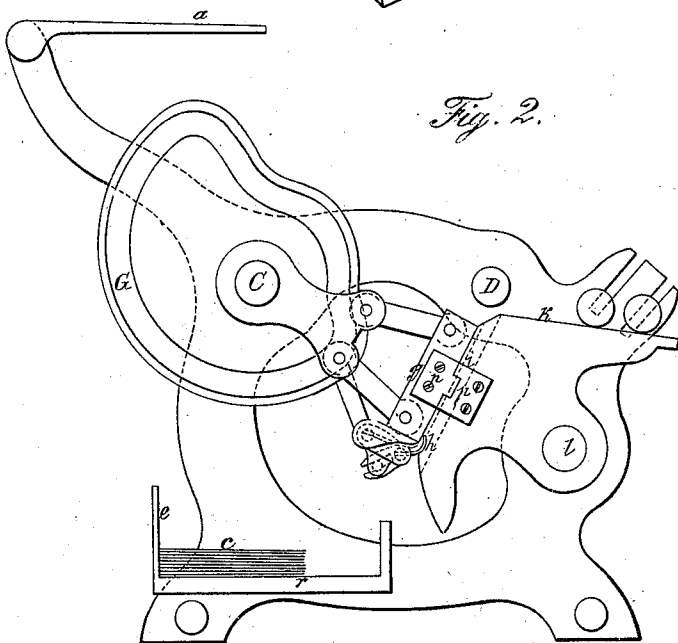
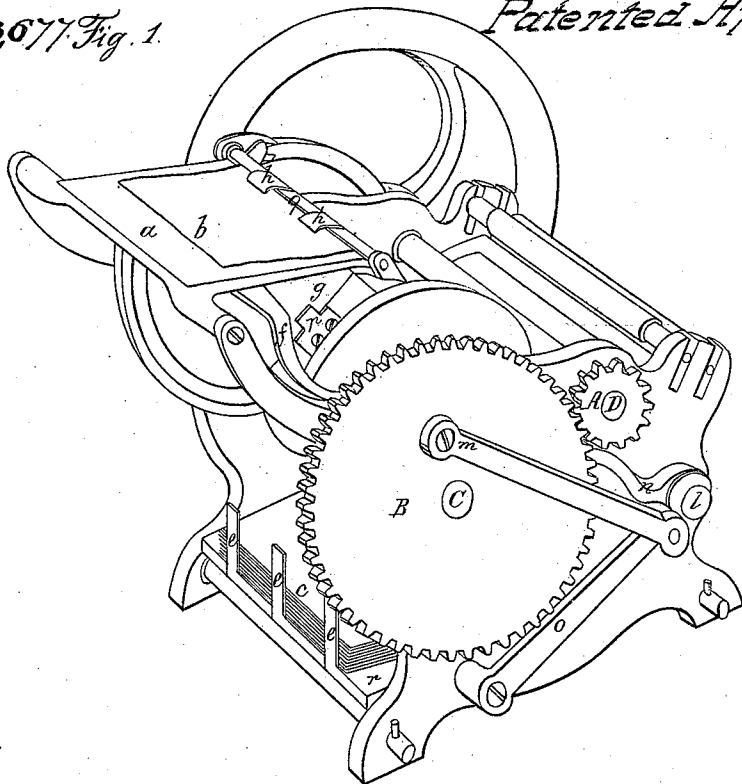


G. P. Gordon. *Sheet 1, 2 Sheets.*  
*Printing Press.*

*No 23,677 Fig. 1.*

*Patented Apr. 19, 1859.*



*Fig. 2.*

*Witnesses.*

*F. O. Degenet.*  
*J. H. Kinsley*

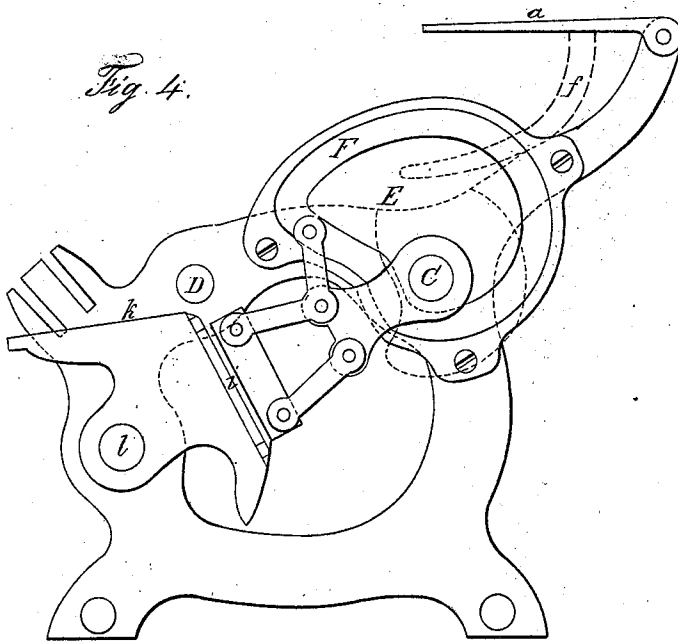
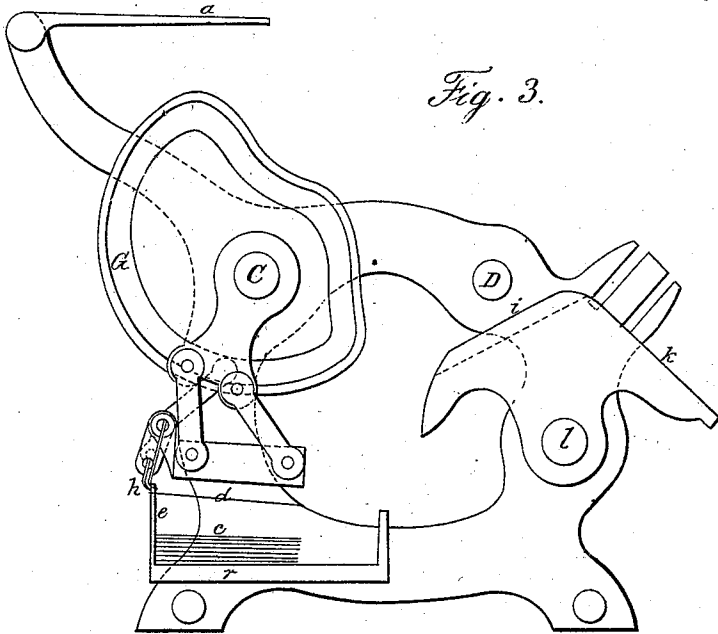
*Inventor.*

*G. P. Gordon.*

G. P. Gordon. *Sheet 2 of Sheet 2.*  
Printing Press.

No. 23,677.

Patented Apr. 19, 1859.



Witnesses.

F. O. Degener.  
J. A. Kingsley

Inventor.

G. P. Gordon

# UNITED STATES PATENT OFFICE.

GEO. P. GORDON, OF NEW YORK, N. Y.

## PRINTING-PRESS.

Specification of Letters Patent No. 23,677, dated April 19, 1859.

To all whom it may concern:

Be it known that I, GEORGE P. GORDON, of the city of New York, in the county and State of New York, have invented certain  
5 new and useful Improvements in the Construction and Operation of Printing-Presses; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the  
10 accompanying drawings, making a part of this specification, and the letters of reference thereon, like letters always denoting the same part or piece in all the figures of the drawings, in which—

15 Figure 1, is a perspective view; in this view are shown the pinion (A), and driving-wheel (B); the pinion being placed upon the driving-wheel shaft (D), in drawings; (on the opposite side of the press,  
20 upon the same shaft), while the spur-wheel is fast with the main shaft (C); and upon this same shaft are the following cams;— (E) which is to raise the feed-board and also lower it at the proper times; (F) is the  
25 cam which works the compound toggle-joint to give the impression; (G) is the cam on the main shaft by which the fingers, nippers, or grippers are caused to perform their various manipulations, being always gov-  
30 erned in all their motions by the said cam. The feed-board (a) has upon it the pile of blank paper, the sheet being represented by the red line upon the board (see b, Fig. 1); the grippers which are to impinge against or  
35 upon the paper which is laid upon some suitable place or substance, so that the grippers may take the sheet of paper from any place from which it may be fed, to go to the impression, and thence to the place where it is  
40 to be piled in an even heap; that is, one sheet precisely on the top of the sheet that preceded it, (see (c), Figs. 1, 2, and 3,) is in red and shows the heap of paper when piled, while (d), Fig. 3, is a sheet about to be  
45 dropped from the grippers, and is about to meet the elevated or projecting fingers or sheet-stops (e, e,) in the several figures of the drawings.

50 A lever (f), is made fast to the under side of the feed-board. The opposite end of this lever rests upon the cam (E), and this cam causes the feed-board to vibrate up and down at the suitable times to give the sheet to the grippers, and then to raise sufficient  
55 that the platen (g), with its grippers (h) may pass beneath it. A single piece is con-

structed which has apparently two parts, either of which is to perform its duty of alternately inking the form and distributing  
60 the ink; these two parts occupy angular positions one toward the other; (i) being the form bed, and (k) the distributing table for the ink; when in motion these travel together, and have a revolving, alternating, reciprocating motion, which presents one of  
65 these surfaces; that is, the type surface or the ink-distributing surface constantly to the fixed, revolving, ink-supplying rollers; the ink being distributed at (k) and imparted to the form at (i). This bed and distrib-  
70 uting-table act upon their axis (l). The bed and distributing-table receive their motion from the main shaft; a connecting-rod being fast to the spur-wheel somewhat cranked or set eccentric to the main shaft;  
75 this will be known as (m, Fig. 1); a vibrating cam (n) is fast with the axis (l); this cam is further controlled in its movements by the vibrating arm or crank (O).

80 A compound toggle, of known construction is fixed upon the main shaft, the opposite extreme part being fixed to the platen, on its back-side, which at the proper time, through the cam (F) is caused to advance  
85 to the bed and form, and give the impression. Upon the bed and platen are guides (p), the one being male and the other female, and these serve to guide, and in some measure control the movements of these  
90 parts, so as to avoid slurs or other inaccuracies in relation to a correct impression.

Grippers (h) are arranged at or near the front edge of the revolving platen; these  
95 the grippers; although the grippers as here shown have a rock-shaft (q) operated so as to allow the grippers to open and close at the proper times; these movements being controlled by levers or connecting-rods which  
100 are controlled by the revolving cam (G).

105 A pile-board (r) is placed in a suitable place or position to receive the sheet after it is printed and upon which board the sheets of paper may be piled; upon one of  
the ends or sides, at or near the edge, to suit convenience, are placed certain elevated or projecting fingers or stationary stops, so arranged that as the grippers or nippers approach and open they shall pass between the  
110 fingers, these fingers meet the edge of the sheet to be piled, and relieving it from the

revolving grippers, cause it to fall or drop  
 in its place against the guides or stationary  
 fingers (whether one or more be used,) so  
 that each and every sheet will be deposited  
 5 in the same place; that is, one sheet directly  
 upon its predecessor, in an even and regular  
 pile (as seen at *c*, red lines in Figs. 1, 2, and  
 3), resting upon the pile-board and against  
 the fingers (*e*) or their equivalent, so that  
 10 by this pile-board and its attachments, (the  
 fixed fingers), the sheets will fall, as relieved  
 from the grippers, in an even pile, by means  
 of the form or position of the pile-board and  
 the projecting fingers. The red lines in  
 15 Figs. 1, 2, and 3 represent the piled sheets  
 of paper as a heap, with the exception that  
 in Fig. 3 (*d*) represents a sheet as being  
 ready to drop into its place against the fin-  
 gers and upon the pile-board; the grippers  
 20 opening at a proper time to give the sheet  
 to the fixed fingers for that purpose. The  
 front or feeding edge of the feed-board is  
 provided with suitable openings so that  
 when the sheet is fed to its gage the revol-  
 ving nippers will close within such openings  
 and thus seize and hold the sheet of paper  
 and carry it to the place of impression and  
 thence to the place of deposit, where it is  
 30 arrested, as the fingers relieve it, thus caus-  
 ing it to be deposited in an even pile against  
 the fingers and upon the pile-board.

I wish it to be distinctly understood that  
 it is immaterial how or when the revolving  
 grippers shall receive the sheets of paper,  
 35 as a material object is to take the sheets of  
 paper after they have received the impres-  
 sion to a suitable place of deposit and there  
 by and with the aid of the fingers or stops  
 or their equivalent pile them in a regular  
 40 heap.

Operation: Motion being given to the  
 driving-shaft (D), the pinion imparts it to  
 the spurwheel (B) and this to the other  
 parts of the machine. We will now suppose  
 45 the sheet of paper about to be or taken by  
 the grippers; the form of the cam (F) by  
 means of a lever connects with the platen  
 and controls all the motions of the platen,  
 from receiving the sheet to its place of de-

posit. By this I wish it to be understood 50  
 that the sheet is seized by the grippers and  
 by them held until the sheet has been print-  
 ed, peeled off the form, and carried to the  
 place of deposit on the pile-board against  
 the fingers (E). 55

The impression and inking apparatus are  
 substantially well known, but are here pro-  
 duced in different relations, (each to the  
 other), than has been before used. The  
 shaft (*l*) is the axis of the bed and distribut- 60  
 ing-table; the cam (*n*) giving to it a vibrat-  
 ing or rocking motion. The inking-rollers  
 are in a fixed except that they are  
 free to revolve on their axes. The part (*i*)  
 is the bed or part of the machine where the 65  
 type to be printed from are placed; the part  
 (*k*) is the ink-distributing-table; these are  
 in one piece, and as they rock to and fro,  
 alternately, each presents itself at the proper  
 time for distributing the ink and alternately 70  
 presenting the form at the time the platen  
 advances to receive the impression. The im-  
 pression being given, the platen recedes, the  
 sheet of paper is peeled off the form, and is  
 then conveyed to the place of deposit, on the 75  
 pile-board against the stationary fingers or  
 stops for detaining and piling the sheets of  
 paper.

Having fully described my printing press,  
 what I claim as my invention and desire to 80  
 secure by Letters Patent is,

1. The combination of one or more sets of  
 revolving grippers with the finger-stops, or  
 their equivalents, for the purpose of piling 85  
 the sheets of paper in an even and regular  
 heap or pile, substantially as described.

2. I claim the combination of a vibrating  
 feed-board with the rotating or revolving  
 platen for the purpose of feeding the sheets  
 of paper regularly and with precision at 90  
 each rotation of the platen.

3. I claim the combination of a rotating  
 reciprocating bed with a revolving platen,  
 all of which is fully described.

GEO. P. GORDON.

Witnesses:

J. L. KINGSLEY,  
 JOHN HENRY.