(No Model.)

P. JACKSON.

PRINTING MACHINE.

No. 322,609. Patented July 21, 1885.

Fig. 1.

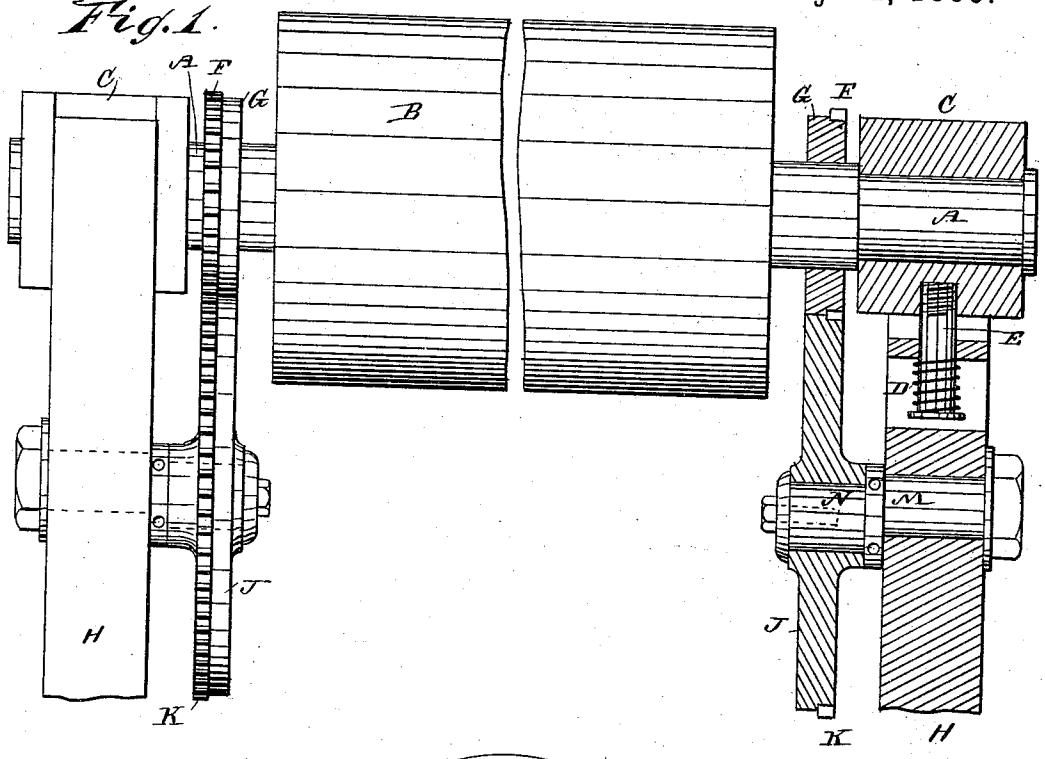
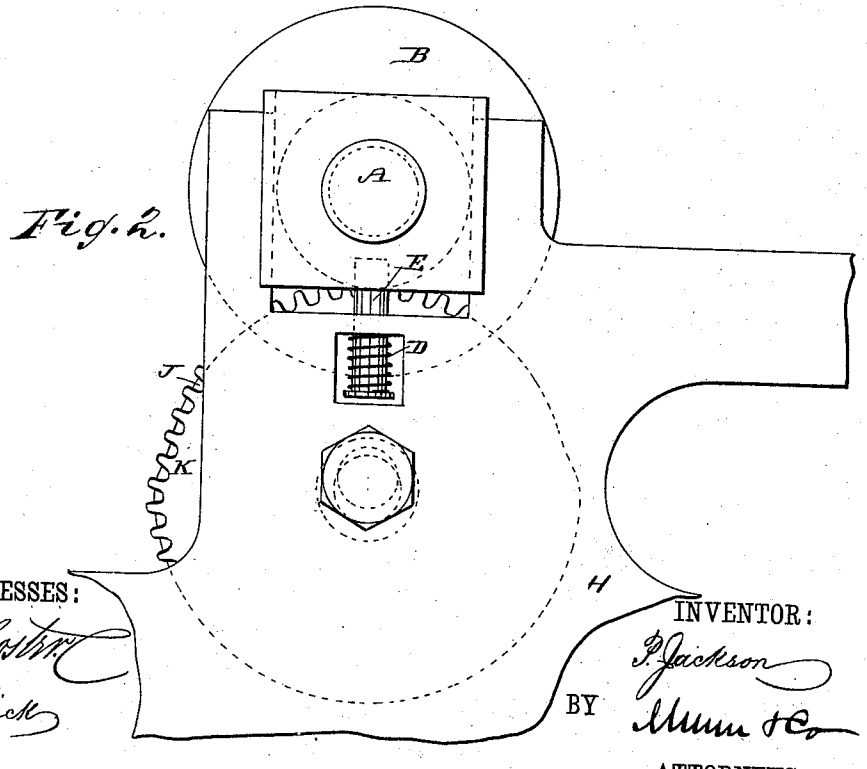


Fig. 2.



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UNITED STATES PATENT OFFICE.

PHILIP JACKSON, OF PLAINFIELD, NEW JERSEY.

PRINTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 322,609, dated July 21, 1885.

Application filed October 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, PHILIP JACKSON, of Plainfield, in the county of Union and State of New Jersey, have invented a new and useful Improvement in Printing-Machines, of which the following is a full, clear, and exact description.

This invention relates to two-revolution printing-presses, and has for its object to raise the impression-cylinder during the return of the type-bed.

My invention consists in the construction and combinations of parts, as will be hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is partly a longitudinal and partly a longitudinal sectional elevation of my improvement in printing-presses. Fig. 2 is an end view of the same.

The journals A of the impression-cylinder B are journaled in two vertically-sliding journal-boxes, C, and pins E, provided with heads at their lower ends, project downward from the journal-boxes into recesses in the frame, as shown. Springs D surround the pins E, and act to effect a downward pressure when the weight of the cylinder is insufficient.

On each end of the shaft of the cylinder B a cog-wheel, F, is rigidly mounted, which is made integral with a smooth-edged disk, G.

On the frame H a cam-disk, J, is mounted below each smooth disk G, which cam-disks J are each made integral with a cog-wheel, K, the outline of which coincides with the outline of the cam-disk J; or the outlines of the cog-wheels K may be circular, if preferred, as the rise of the cam is so slight that circular wheels can be used. The impression-cylinder B is concentrically revolved in the same direction by suitable devices. When the type-table passes under the cylinder and the impression is being made, the cylinder is pressed on the type-table by the springs D, and those parts of the cam-disk J and of the cog-wheel K having the smaller diameter engage, respectively, with the smooth disk G and the cog-wheel F. When the type-table makes its return movement, those parts of the cam-disk J, and of the cog-wheel K having the larger diameter engage with smooth disk G and the cog-wheel F, respectively, and raise the disk G and the cog-wheel F and the cylinder B, so that the cylinder will not be in contact with the type-table, for then the distance between the centers of the wheels J K and F G is greater than when the smaller halves of the wheels J K engage with the wheels F G. The pivot N, on which the wheels J K are mounted, is eccentric to the pintle M, so that by turning the pintle the wheels J K can be adjusted to raise the cylinder more or less.

Having thus described my invention, I claim an new and desire to secure by Letters Patent—

1. The combination, with an impression-cylinder and gearing at opposite sides of the same, of cam-disks journaled below the cylinder for raising the same, and gearing connected with said cam-disks and meshing with the cylinder-gearing, whereby, when the cylinder is rotated, the cam-disks will be rotated to raise the same automatically, substantially as set forth.

2. The combination of an impression-cylinder, the shaft of which on both sides of the said cylinder is provided with gear-wheels and plain disks with two gear-wheels mounted below said cylinder and provided with cam-disks, the said upper and lower gearing meshing, and plain and cam disks contacting whereby the cylinder will be automatically lifted, substantially as set forth.

3. In a printing-press, the combination, with the cylinder B, of the wheels F G and the wheels J K, the latter mounted eccentrically on a pintle, M, substantially as herein shown and described.

PHILIP JACKSON.

Witnesses:
CHAS. H. GILL,
JANE M. W. JACKSON.