

W. JOHNSON.
Printing-Press.
No. 128,731.

Patented July 9, 1872.

Fig. 1.

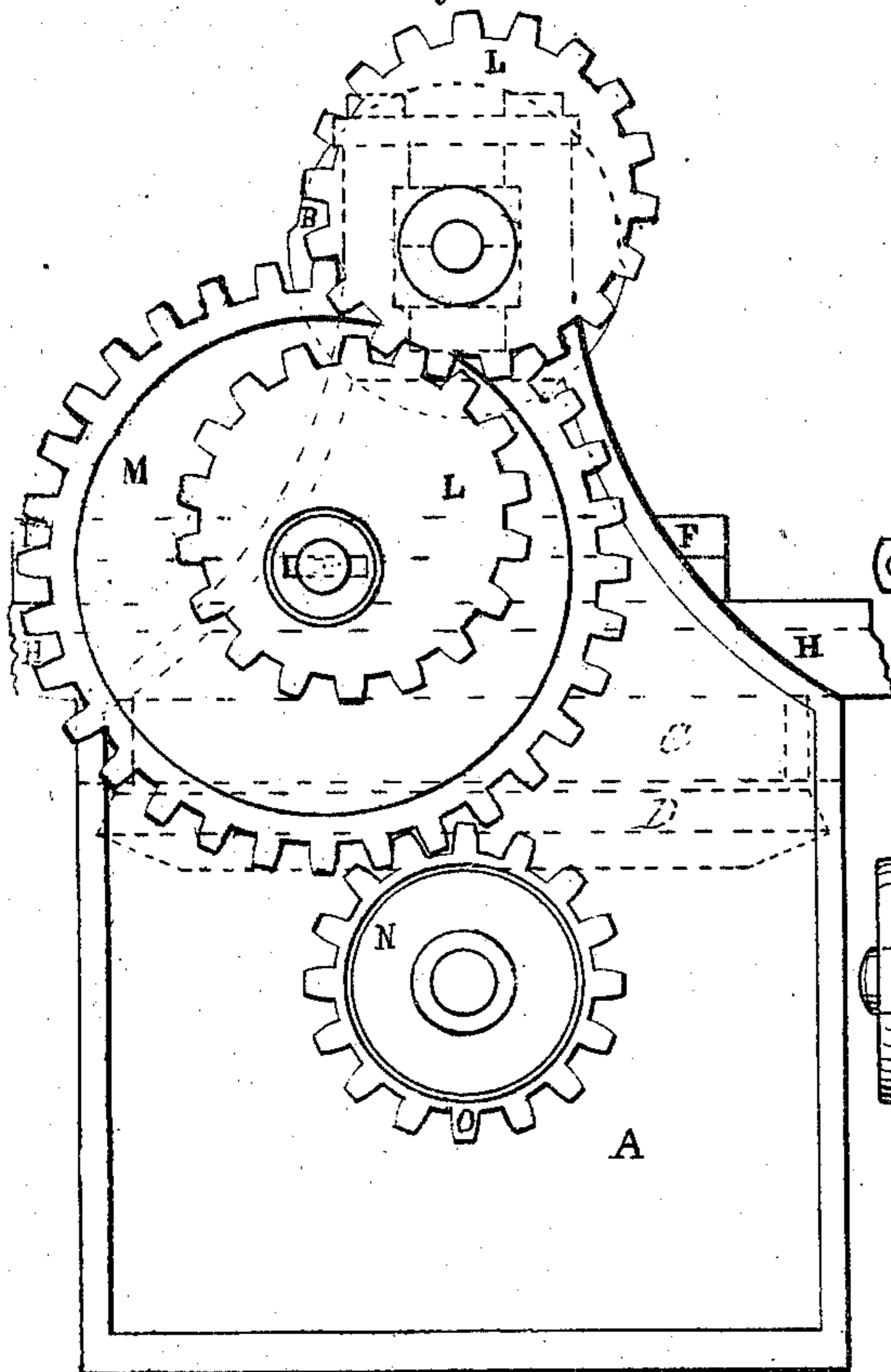


Fig. 2.

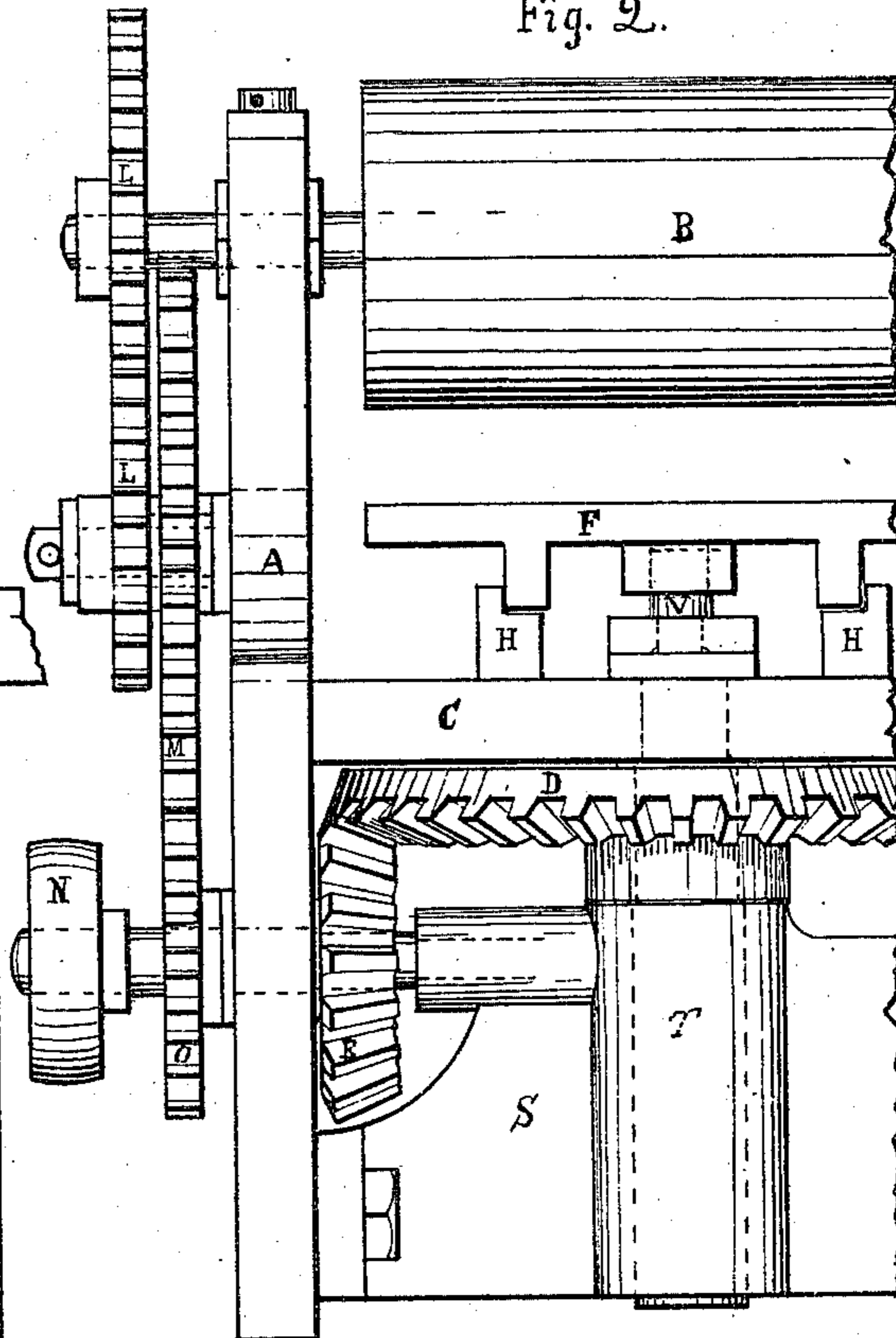
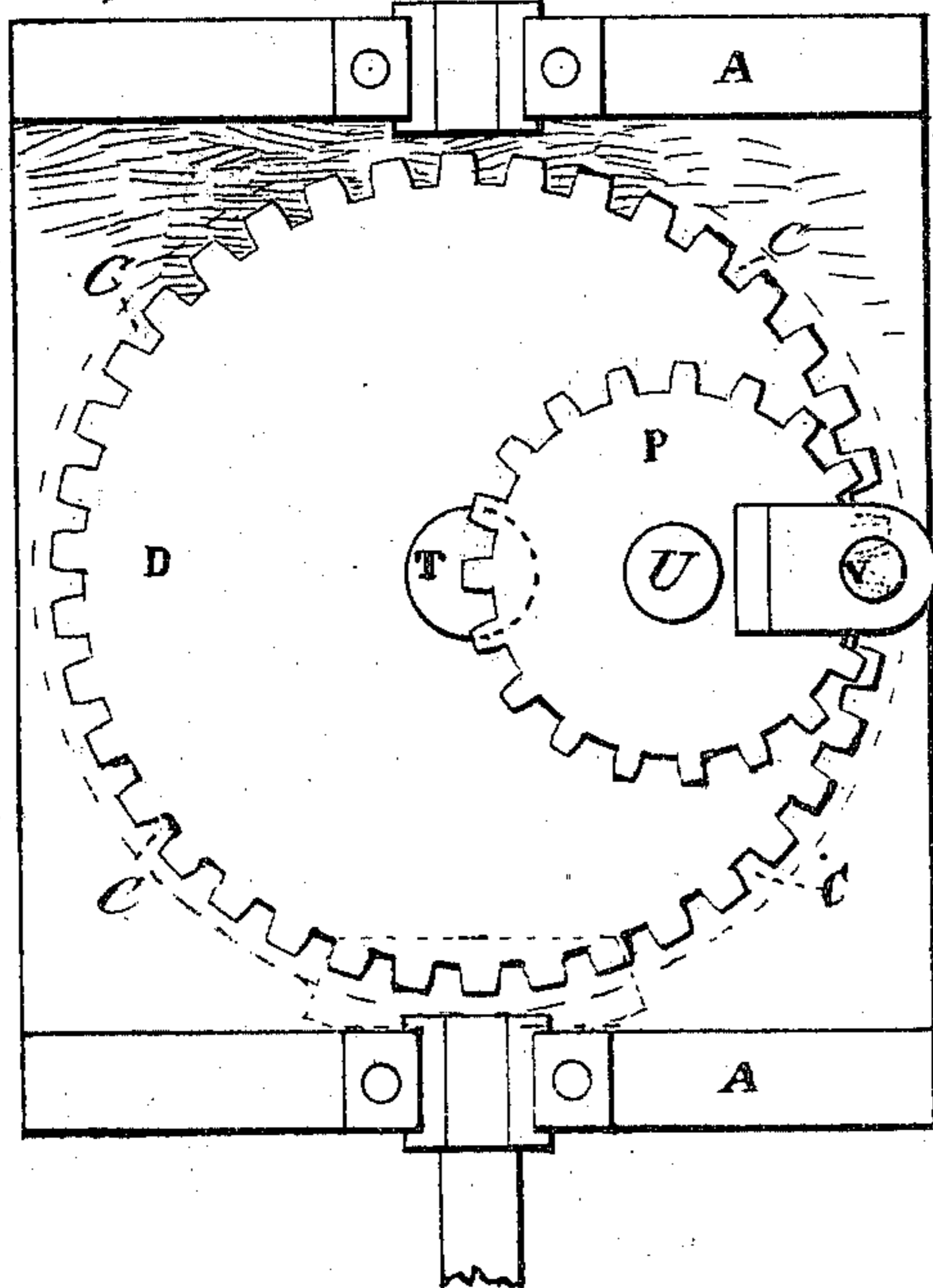


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM JOHNSON, OF LAMBERTVILLE, NEW JERSEY.

IMPROVEMENT IN PRINTING-PRESSES.

Specification forming part of Letters Patent No. 128,731, dated July 9, 1872.

Specification describing certain Improvements in Printing-Presses, invented by WM. JOHNSON, of Lambertville, in the county of Hunterdon and State of New Jersey.

My invention relates to that kind or style of printing-press having a reciprocating table or bed upon which the type-form is placed and the impression made by passing under a cylinder which revolves continuously in the same direction, carrying the paper upon its surface, a portion of said cylinder being cut away to allow the type to pass back without contact therewith after the impression has been made; and it consists, briefly, in the combination of eccentric gear or toothed wheels for revolving the cylinder with a gradually increasing and diminishing reciprocating movement of the bed, whereby a smooth, positive, and connected motion of bed and cylinder is obtained.

In the accompanying drawing, Figure 1 is a side view or elevation. Fig. 2 is an end or front view. Fig. 3 is a plan view of parallel motion.

A is the frame, made in the usual manner. B is the impression-cylinder. C is the internal or toothed rim. D is a bevel-toothed wheel, into which a bearing or wrist-pin, U, is inserted. P is a spur-pinion wheel in contact with the internal-toothed rim C, revolving upon wrist-pin, U. Said spur-pinion has a bearing or wrist-pin, V, solidly attached, by means of which the bed is moved. E is a bevel-pinion wheel through which motion is communicated. F is the table carrying the type-form. H H are the bearings or supports upon which the bed moves. O is a pinion-wheel upon the driving-shaft. M is a toothed spur-wheel driven by pinion O. L L are the eccentric toothed wheels, one of which is keyed fast to spur-wheel M, and revolves therewith upon a stud, and in contact with the other eccentric-wheel

upon the cylinder shaft. T is a shaft or journal for bevel-wheel D. S is a bearing or support through which shaft T passes. N is the driving-pulley.

Its operation is as follows: Motion being communicated to the driving-shaft, the bed upon which the type-form rests is driven forward under the cylinder by means of the crank-wheel, toothed rim, and spur-pinion, while the cylinder, having upon its outer surface the paper to be printed, is revolved upon its axis with a variable motion imparted thereto by the eccentric toothed wheels, so that that portion of the cylinder's periphery in contact with the face of the type, and upon which the impression is made, conforms or corresponds accurately in motion to the movement of the bed. After the impression has been made and the bed has reached the end of its forward stroke, it is then returned back in like manner, while the cylinder continues to revolve, discharging the printed sheet and taking on another, repeating the operation as before, one revolution of the cylinder being made to one double or forward and back movement of the bed.

What I claim as my invention is—

1. The combination of eccentric toothed wheels L L, cylinder B, and reciprocating bed F, for the purpose substantially as described and set forth.

2. The eccentric gears L L, for giving a variable rotary movement to the cylinder, in combination with the toothed rim C, pinion P, and the connecting mechanism for giving a corresponding reciprocating movement to the bed, substantially as described.

WM. JOHNSON.

Witnesses:

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