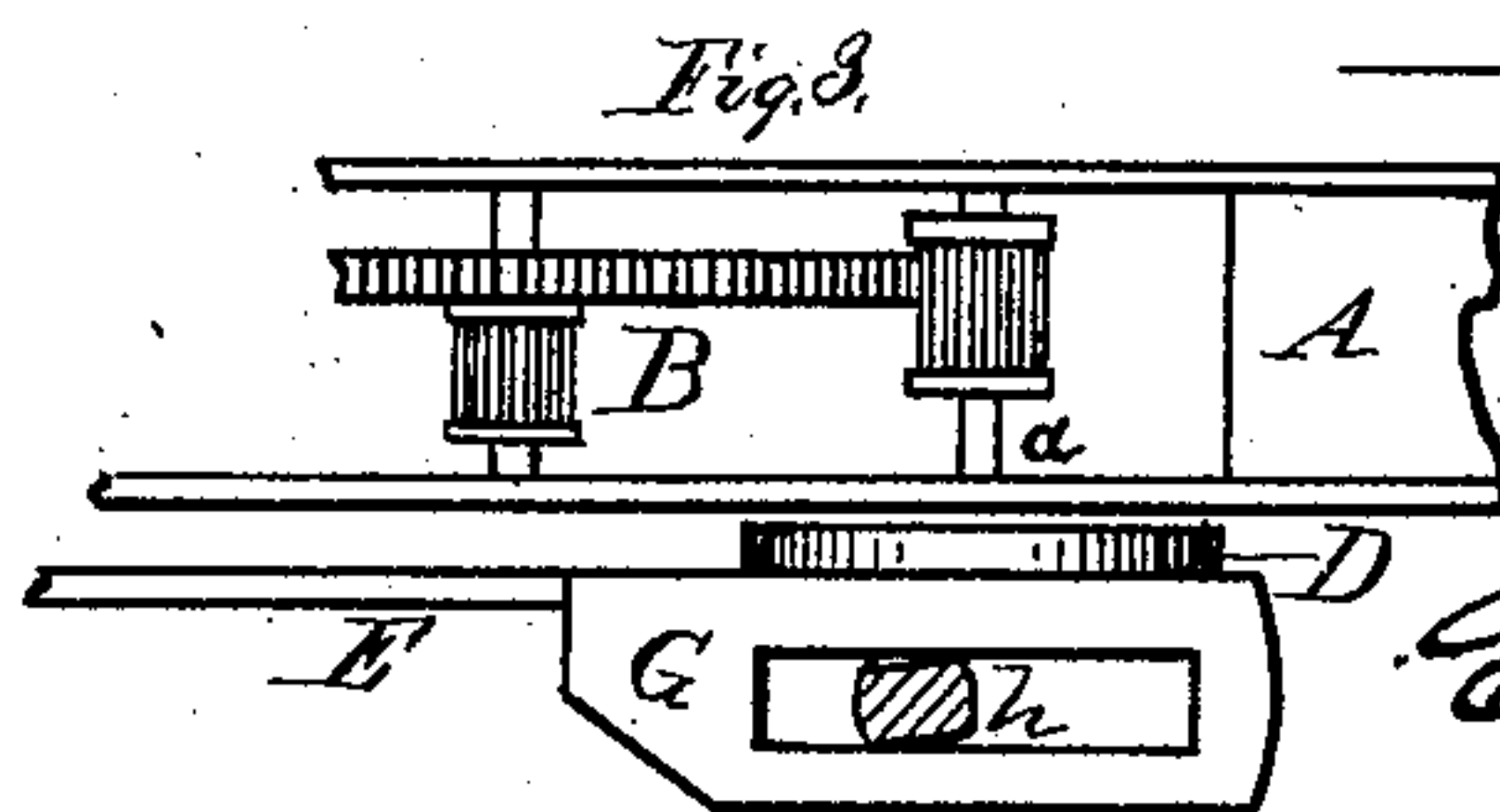
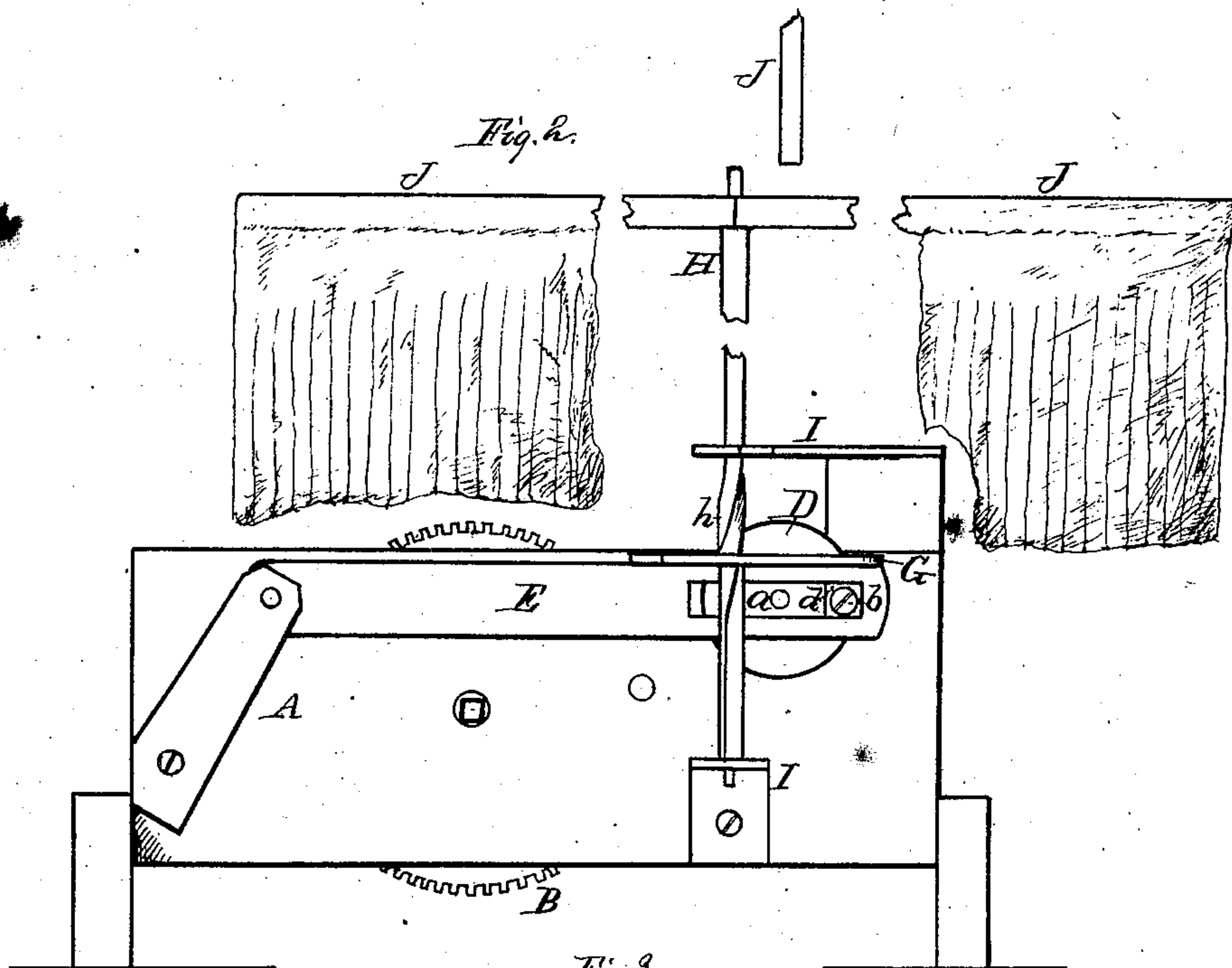
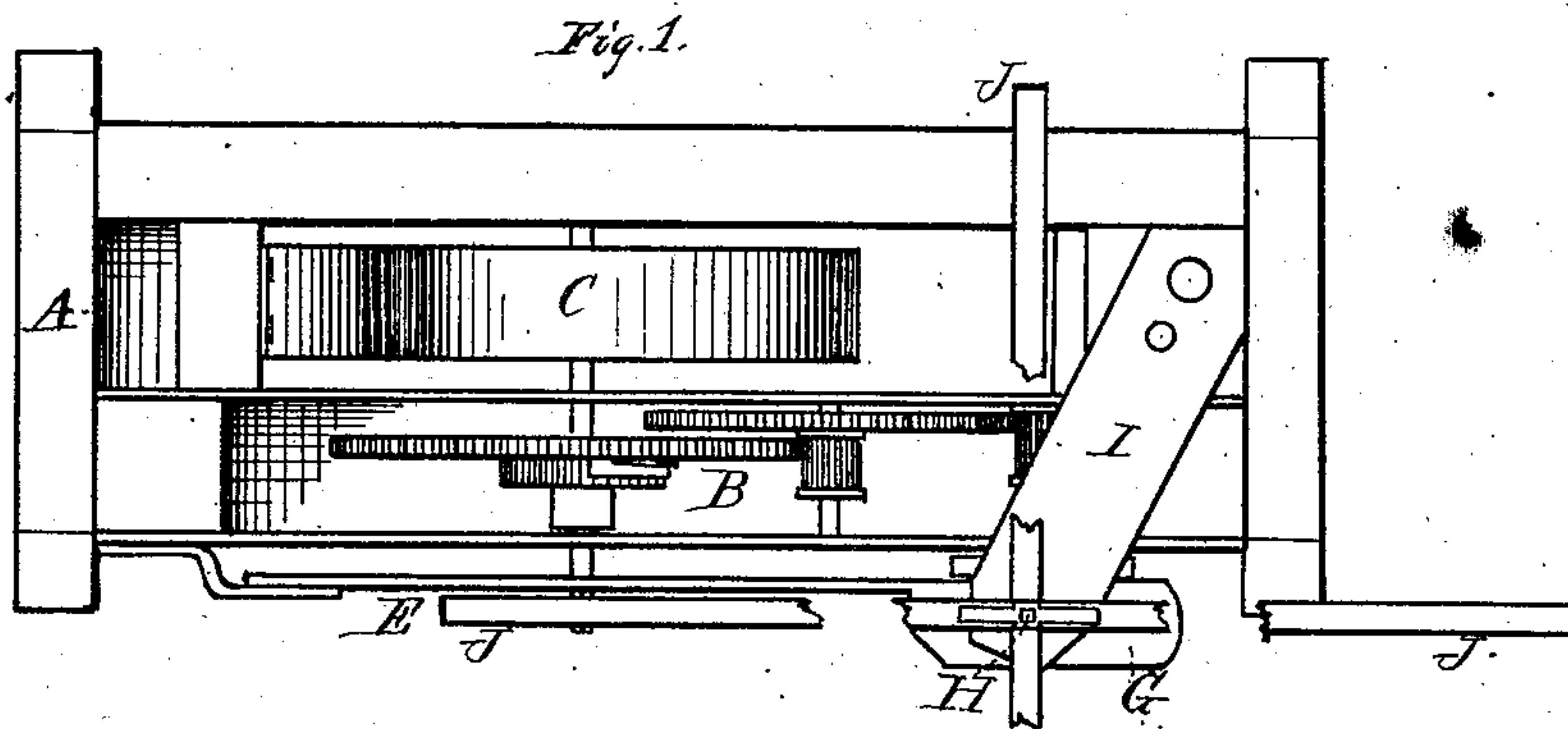


S. L. LONG.  
Automatic Fly-Brush.

No. 162,482.

Patented April 27, 1875.



Witnesses;  
Thomas Byrne,  
Jas F. Duhamel

Inventor;  
S. L. Long  
Per. H. S. Abbott  
Attorney.

# UNITED STATES PATENT OFFICE.

SAMUEL L. LONG, OF KEITHSBURG, ILLINOIS, ASSIGNOR OF ONE-HALF HIS  
RIGHT TO W. D. SMITH.

## IMPROVEMENT IN AUTOMATIC FLY-BRUSHES.

Specification forming part of Letters Patent No. **162,482**, dated April 27, 1875; application filed  
March 29, 1875.

*To all whom it may concern:*

Be it known that I, SAMUEL L. LONG, of Keithsburg, county of Mercer and State of Illinois, have invented certain new and useful Improvements in Fly-Brush, of which the following is a specification:

My invention consists in the construction and arrangement of a fly-brush for tables, operated by clock-work, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a plan view, and Fig. 2 a side elevation, of my fly-brush. Fig. 3 is a detached view of the connection between the clock-work and fly-brush shaft.

A represents the case or frame, divided by means of longitudinal partition in two compartments, one containing the clock-work B, and the other the operating-spring C, thus giving more room for said spring to expand. *a* is the last shaft in the train B, and on the end of said shaft is secured a disk, D, having a crank-pin, *b*, on its outer side. On this pin is loosely placed a box, *d*, which slides in a longitudinal slot in one end of a lever, E, which is pivoted at its other end to the frame or casing A. The lever E is provided with an outwardly-projecting lip or flange, G, which

is slotted longitudinally, and passed over a spiral part, *h*, of a vertical shaft, H, placed in suitable bearings I I, and having at its upper end arms J J, to which the brushes K K are attached.

When the clock-work is in motion the disk D is kept continually revolving; thereby moving the lever E, with its flange G, continuously up and down; and as this flange is placed over the spiral part *h* of the shaft H a reciprocating rotating motion is imparted to the shaft, and the arms and brushes attached thereto.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fly-brush operated by clock-work, a spiral shaft, upon which the brushes are secured, in combination with a reciprocating lever, for imparting to said shaft a reciprocating rotating motion, substantially as herein set forth.

2. The combination of the revolving disk D, with crank-pin *b* and box *d*, the pivoted slotted lever E, with slotted flange G, and the shaft H, having spiral part *h*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my invention I hereunto affix my signature this 18th day of March, 1875.

SAMUEL L. LONG.

Witnesses:

HENRY L. LONG,  
WM. D. SMITH.