

R. J. CLAY.  
Automatic-Toys.

No. 158,781.

Patented Jan. 19, 1875.

Fig. 1.

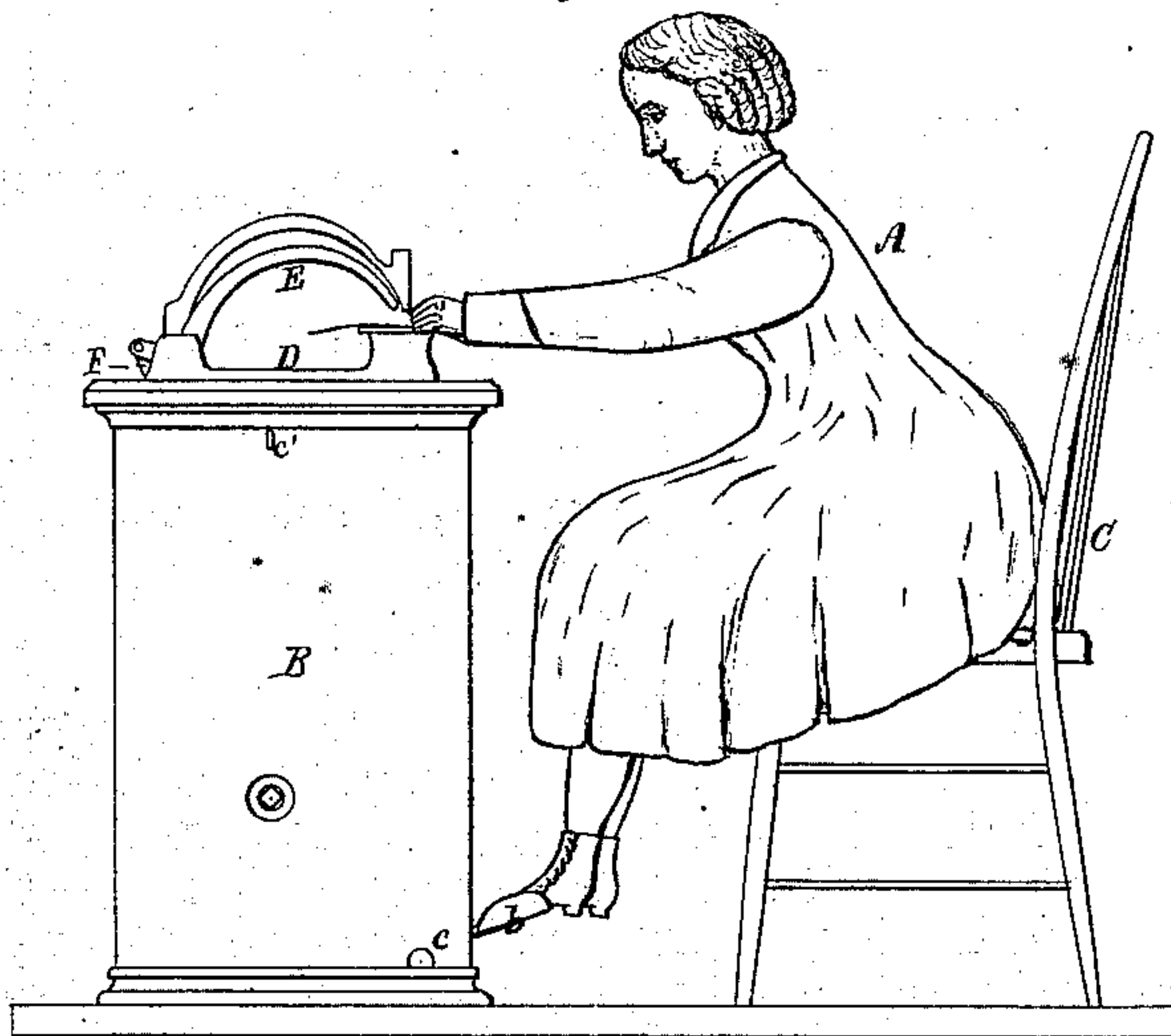


Fig. 2.

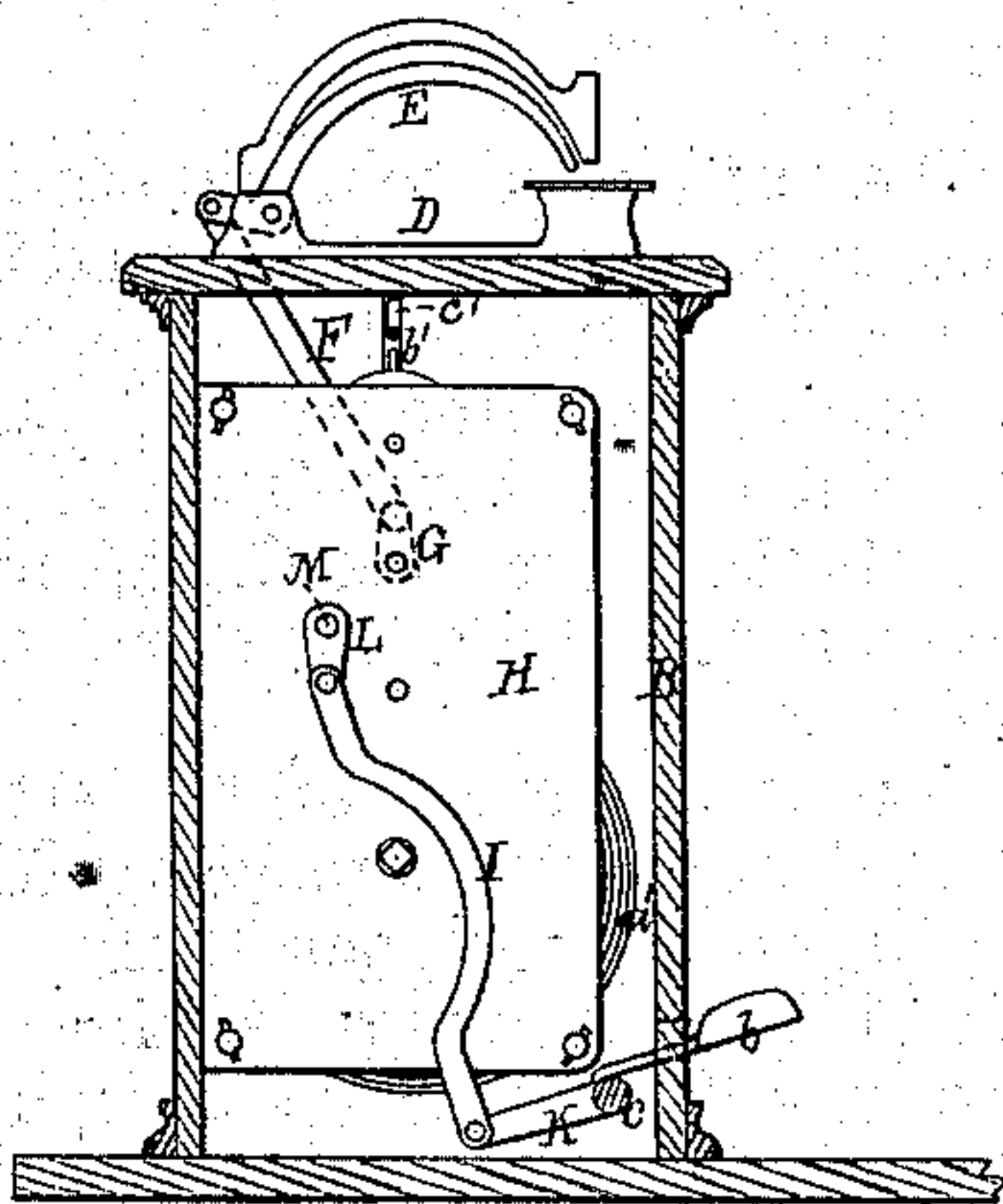
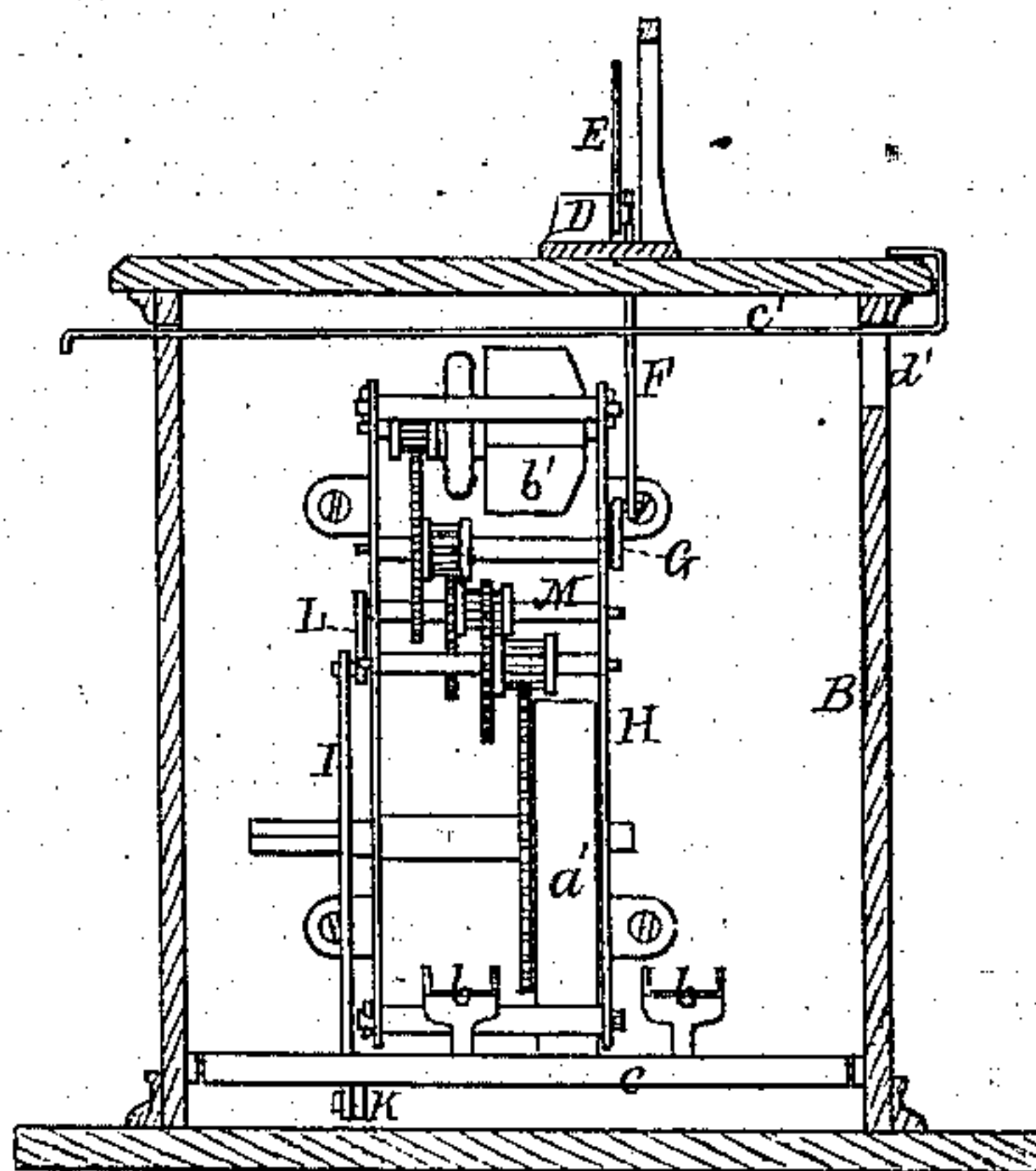


Fig. 3.



Witnesses  
S. N. Piper  
L. N. Hoeller

Robert J. Clay  
by his attorney  
R. M. Eddy

# UNITED STATES PATENT OFFICE.

ROBERT J. CLAY, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN AUTOMATIC TOYS.

Specification forming part of Letters Patent No. **158,781**, dated January 19, 1875; application filed June 10, 1874.

*To all whom it may concern:*

Be it known that I, ROBERT J. CLAY, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new Mechanical Toy; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a side elevation, Fig. 2 a longitudinal section, and Fig. 3 a transverse section, of it.

This toy is the automatic representation of a person operating a sewing-machine.

The first part of the invention is a figure or doll, A, seated on and pivoted to a seat or a chair, C, the legs of the doll being jointed at the knees and hips in the usual way, and with the feet resting upon two pedals, *b b*, extended from a horizontal rock-shaft, *c*, arranged across the corner part of a table or box, B. The invention further consists in a sewing-machine frame, D, provided with a curved lever, E, to represent a needle-arm, such lever, at or near its rear end, being pivoted to a connecting-rod, F, which extends down into the case B, and is pivoted to a crank, G, projecting from the lantern pinion-shaft of a clock mechanism, shown at H. To another crank, L, of another shaft, M, of said mechanism H, a connecting-rod, I, is pivoted, and extends down and is pivoted to an arm, K, extended horizontally from the rock-shaft *c*.

The clock mechanism is to be such that when wound up and set going it will revolve simultaneously both of the cranks G and L, in order to vibrate the pedals and needle-arm, or impart to them reciprocating motions.

The clock-work mechanism H is such as is generally used in mechanical toys, it consisting of a mainspring, *a'*, and a train of gears provided with a resisting fan-wheel, *b'*. Directly over the fan-wheel *b'* a rod, *c'*, is extended through the case B, and a slot, *d'*, made on one side thereof, the whole being so as to enable the rod to be moved down across and into the path of revolution of the fan-wheel, for the purpose of arresting the rotary motion of such wheel whenever the same may be necessary, especially just preparatory to winding up the mainspring by a key applied to its arbor.

The toy, when in operation, is a pleasing illustration of a person engaged in operating a sewing-machine.

I claim—

1. The automatic toy, substantially as described, consisting of the seated figure or doll A, the rock-shaft *c*, and one or more pedals, *b b*, the sewing-machine frame D, and the vibratory needle-arm or lever E, all applied together and to the table or case B, and provided with mechanism for operating them, essentially as explained.

2. The combination of the stop-rod *c'* and the automatic toy, consisting of the seated doll or figure A, the rock-shaft *c*, one or more pedals, *b b*, the sewing-machine frame D, vibratory needle-arm or lever E, and the clock mechanism H, all being arranged and applied substantially as specified.

R. J. CLAY.

Witnesses:

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