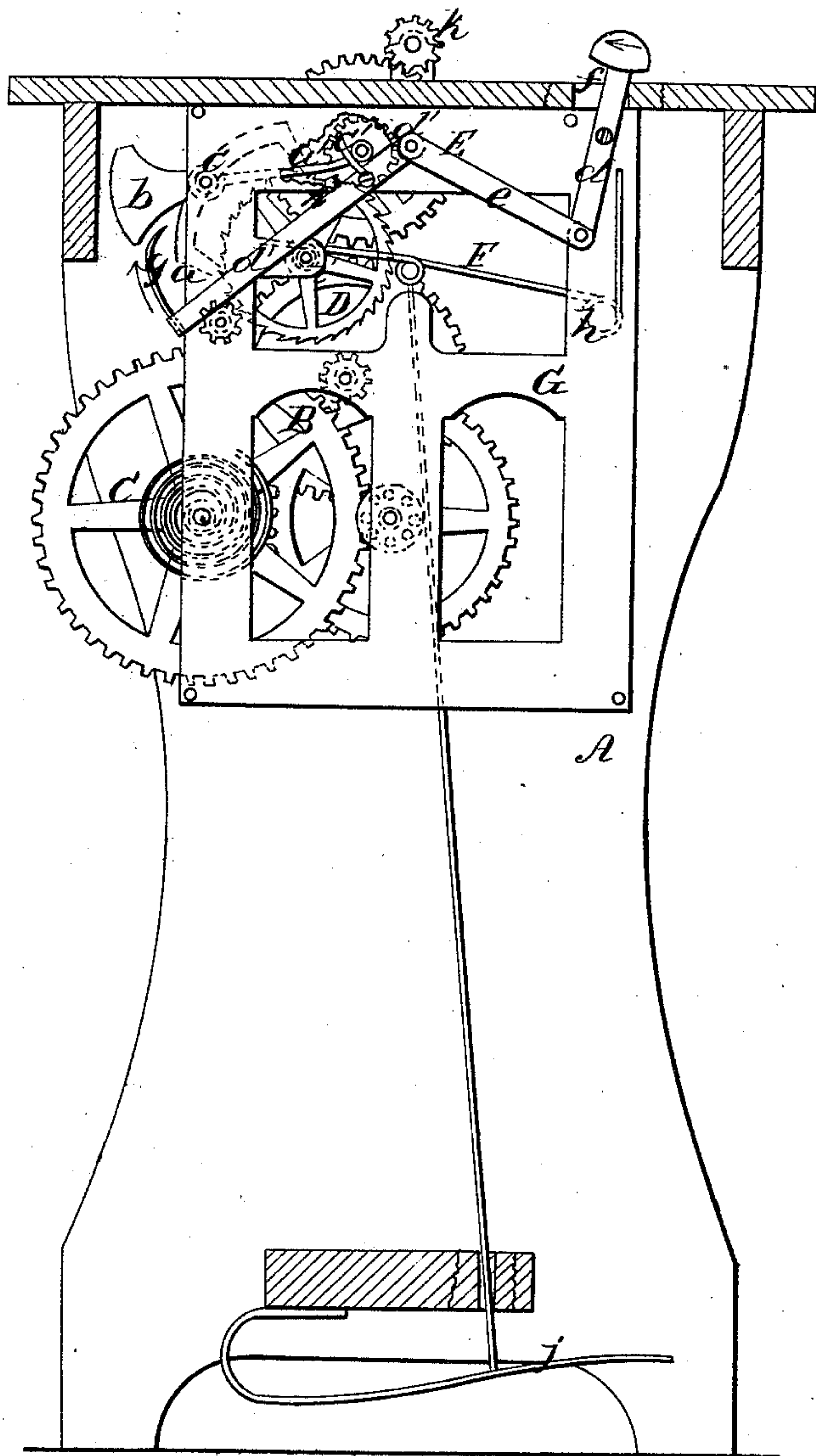


L. Curdts,

Mechanism for Applying Power to Machinery.

N^o 67,730.

Patented Aug. 13. 1867.



Witnesses;
Theo Fricke
Wm Freura

Inventor;
L Curdts
Per Mund Co
Attorney

United States Patent Office.

LOUIS CURDTS, OF NEW YORK, N. Y.

Letters Patent No. 67,730, dated August 13, 1867.

IMPROVEMENT IN MECHANISM FOR APPLYING POWER TO MACHINERY.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, L. CURDTS, of the city, county, and State of New York, have invented a new and improved Power Mechanism for Sewing Machines; and that the following description, taken in connection with the accompanying drawing hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

This invention relates to a new and useful adaptation of a clock movement with a spring or weight as a power to the driving of sewing machines.

The invention consists in an improved means for controlling the power, a substitute for the pendulum, as hereinafter fully shown and described, and also in an improved stop mechanism and a brake, all of which are hereinafter fully shown and described, whereby complete control is obtained over the motor, its stopping and starting, and the regulating of its speed being at the will of the operator. In the accompanying drawing a side view of my invention is shown applied to the stand of a sewing machine.

A represents the stand of a sewing machine, which may be of the usual or any proper construction, and B is a system of gearing precisely like an ordinary clock movement. In this instance a spring, C, is employed for giving motion to the movement, but a weight may be substituted for it if desired. There is nothing peculiar in the construction or arrangement of the clock movement, in itself considered, with the exception of the escapement, which consists of the usual scape-wheel D, anchor-pallets *a a'*, with a counterpoise, *b*, attached, as shown clearly in the drawing. This counterpoise *b* is simply one which may be attached to the shaft *c*, on which the pallets *a a'* are secured, or be attached directly to the centre of the pallet-arms, the arm or counterpoise projecting from one side of the pallet-arm or axis thereof. This arm or counterpoise serves in lieu of a pendulum, and regulates or controls the power of the spring or weight. A slender arm, *b'*, projects from the opposite side of the shaft *c*, and has a curved bar or fork, *c'*, at its end, within the concave of which there is a shaft, *d'*, of the movement. This arm controls the extent of the play or vibration of the pallets, as will be fully understood by referring to the drawing, the ends of the curved bar or fork coming in contact with the shaft *d'* at the termination of each stroke or vibration. E represents a stop mechanism, which is composed of two levers *d d'*, connected by a link, *e*. The lever *d* extends upward through a slot, *f*, in the top of the stand, and the other lever, *d'*, is provided at its outer end with a curved arm, *g*, which, when thrown upward, catches under the arm or counterpoise *b* and holds the latter in a raised position so that the upper pallet *a'* will be kept engaged with the scape-wheel D, and serve as a lock or stop, preventing the movement of the parts. F is a brake composed of an elastic or spring bar, one end of which is attached to the frame G, as shown at *h*, and the opposite end, when applied, bears on a shaft, *i*, of the clock movement, and serves as a drag. The brake, by virtue of its own elasticity, retains itself above the shaft *i*, and it is brought down upon the shaft, when required, by means of a treadle, *j*, as will be fully understood by referring to the drawing. The clock movement, when in operation, gives motion to the driving-shaft *k* of the sewing machine. The brake or stop may be applied at any time by shoving the lever *d* forward.

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

1. The arm or counterpoise *b*, and arm *b'*, provided with the curved bar or fork *c'*, in combination with the pallets *a a'*, and the clock movement applied to a sewing machine for the purpose of operating the same, substantially as shown and described.

2. The stop mechanism composed of the levers *d d'* and the link *e*, with the arm *g* on the end of the lever *d'*, all arranged in connection with the pallets *a a'*, to operate in the manner substantially as and for the purpose set forth.

3. The brake F, composed of an elastic or spring bar, arranged in relation with the shaft *i*, and connected with the treadle *j*, substantially as and for the purpose specified.

LOUIS CURDTS.

Witnesses:

WM. F. McNAMARA,
ALEX. F. ROBERTS.