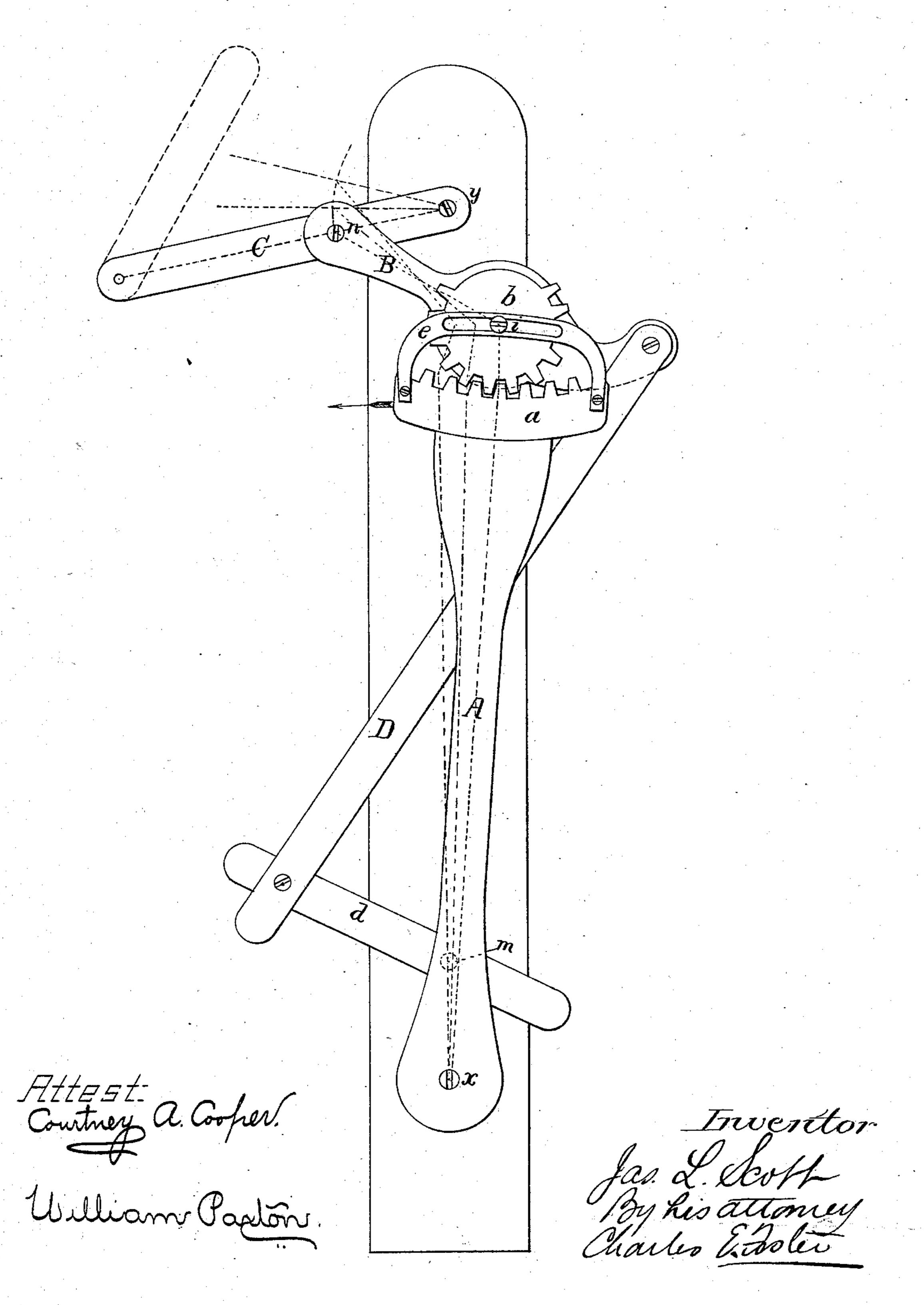
J. L. SCOTT.
Apparatus for Transmitting Power.

No. 223,956.

Patented Jan. 27, 1880.



United States Patent Office.

JAMES L. SCOTT, OF NEW YORK, N. Y.

APPARATUS FOR TRANSMITTING POWER.

SPECIFICATION forming part of Letters Patent No. 223,956, dated January 27, 1880.

Application filed June 27, 1879.

To all whom it may concern:

Be it known that I, James L. Scott, of the city, county, and State of New York, have invented certain new and useful Improvements in Apparatus for Transmitting Power, of which the following is a specification.

The object of my invention is a device for transmitting power to reduce friction, and afford an increased leverage and corresponding increase of power.

In the drawing, the figure illustrates one construction of my improved device, applicable to the operation of sewing-machines from a treadle.

A is a lever or arm, pivoted at one end, x, and carrying a rack, a, at the upper end, which rack is preferably curved, as shown, and B is a bar or rod carrying a toothed wheel or segment, b, which engages with the rack.

This bar must be suspended or connected to the frame-work in such a manner that the segment b will rest upon the rack and travel therewith. In the present instance the bar is jointed to a lever, C, pivoted at y to the frame, and also to the end of arm D, pivoted to a lever, d, on the treadle-shaft, or to the treadle itself.

To prevent the segment from jumping from the rack, a plate or guide, e, on the rack-bar, so is slotted to receive a central projection, i,

of the segment. Pressure upon the ends of the arm d tends to turn the bar B on its pivot n, and to carry the segment and rack back and forth, and to raise and lower the lever C. As the segment travels in the direction of its arrow 35 the action is that of a toggle-joint, or rather of a rapid succession of toggle-joints, as different teeth of the rack and segment engage with each other, as indicated by the dotted lines. It differs from the usual toggle-joint, 40 however, in the fact that the connection-point of the two arms travels from side to side.

It will be apparent that pins and corresponding slots may be substituted for the toothed wheel and ratchet.

I claim—

The combination of the lever A, its rack a, the suspended bar B, its wheel or segment b, the connecting-rod D, operated from the driving device, and lever C, connected to the bar B 50 and to the mechanism to be operated, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES L. SCOTT.

Witnesses:

CHARLES E. FOSTER, WILLIAM PAXTON.