PATENTED JUL 11 1871

J. W. W. Gordon. Treadle for Sewing Machines.

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Fig. 1.

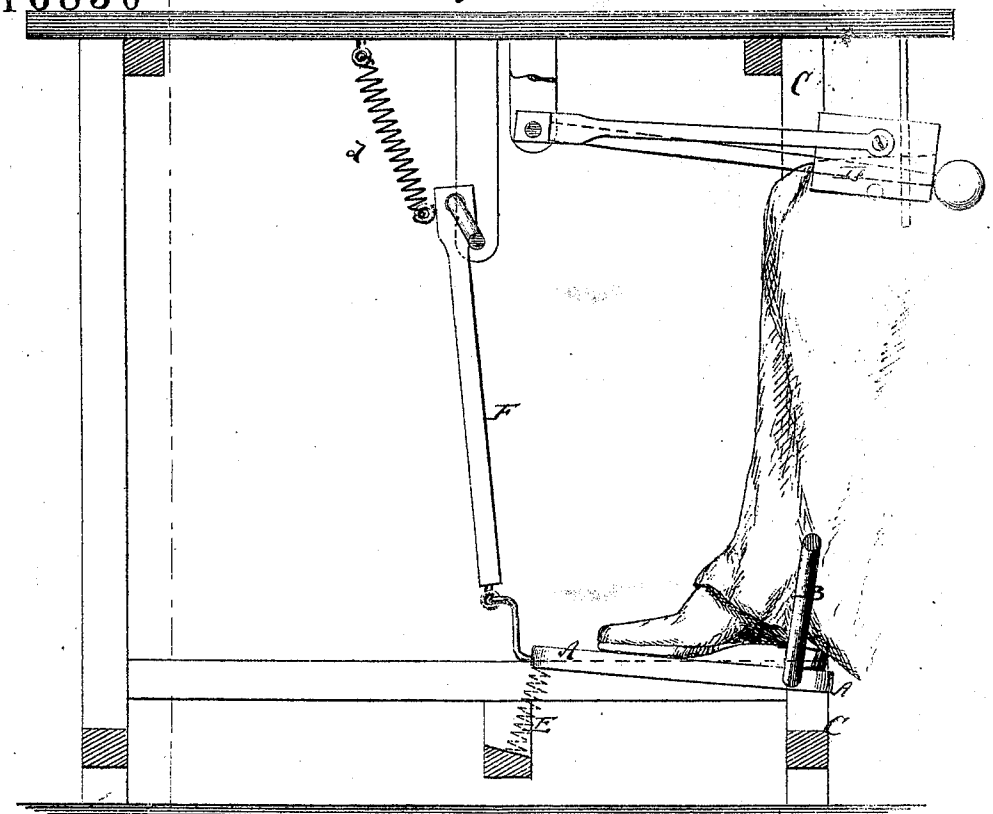
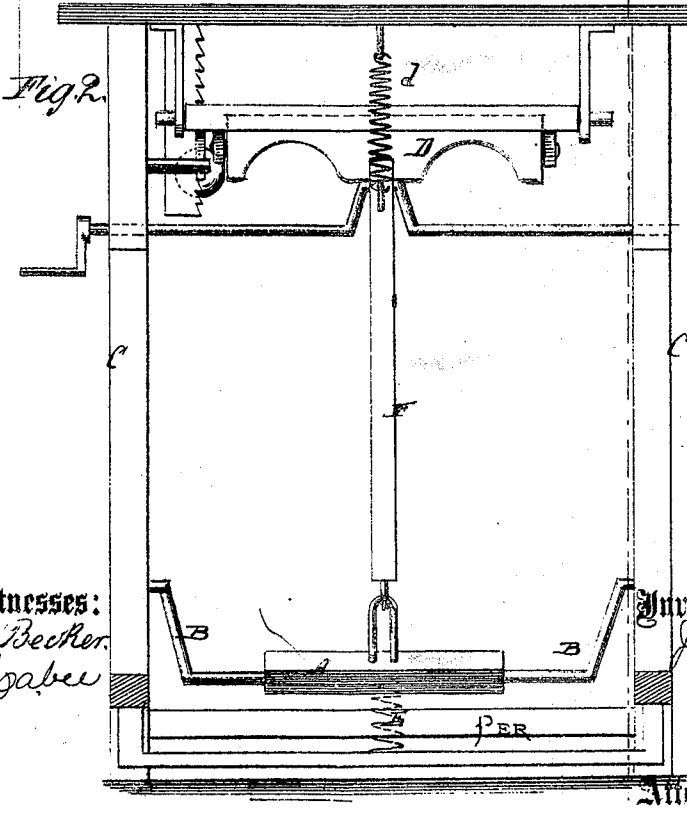


Fig. 2.



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UNITED STATES PATENT OFFICE.

JAMES W. W. GORDON, OF NEWPORT, KENTUCKY.

IMPROVEMENT IN TREADLES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 116,830, dated July 11, 1871.

To all whom it may concern:

Be it known that I, JAMES W. W. GORDON, of Newport, in the county of Campbell and State of Kentucky, have invented a new and Improved Treadle for Sewing-Machines, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a side view of my improved treadle. Fig. 2 is a front view of the same.

Similar letters of reference indicate corresponding parts.

My invention consists in improving treadles, as hereinafter fully described and subsequently pointed out in the claim.

A in the drawing represents a treadle of suitable shape. It is affixed to the lower portions of a U-shaped axle, B, which has its upper ends hung in the frame C of the machine. The depression in the axle is such that when the foot is on the treadle its ankle-joint will be about in line with the said ends. The foot is preferably applied so that the heel is behind the line of the axle, as in Fig. 1; thereby a mere oscillation of the foot on its ankle-joint will suffice to impart the proper motion to the treadle and to the machinery connected therewith. In order to still more simplify the action of the feet I may use the cushion or pressure-pad D in connection with my said treadle, said pad pressing on the knees of the operator, as described in a previous application filed by me. E is a spring, applied against the under side of the treadle under the front end of the same, holding the same up far enough to enable the foot to apply power to the treadle and to move the same in the desired continuity from a state of rest. Such a spring may, if desired, be as well applied, and with equal effect, to the pitman F, which connects with the treadle, as shown at *d* in Fig. 1.

By making the foot swing on the ankle-joint the leg itself remains quite at rest, the knee not moving up and down, as on ordinary treadles. This admits the use of the bracing-cushion, above referred to.

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

The foot-piece A, rock-shaft B, and spring E, when constructed and arranged together, as described, to enable the ankle-joint of the operator to be always held in line with the center of motion of the treadle to save the waste of power in moving the entire lower limb at every vibration of the crank-shaft.

JAMES W. W. GORDON.

Witnesses:

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