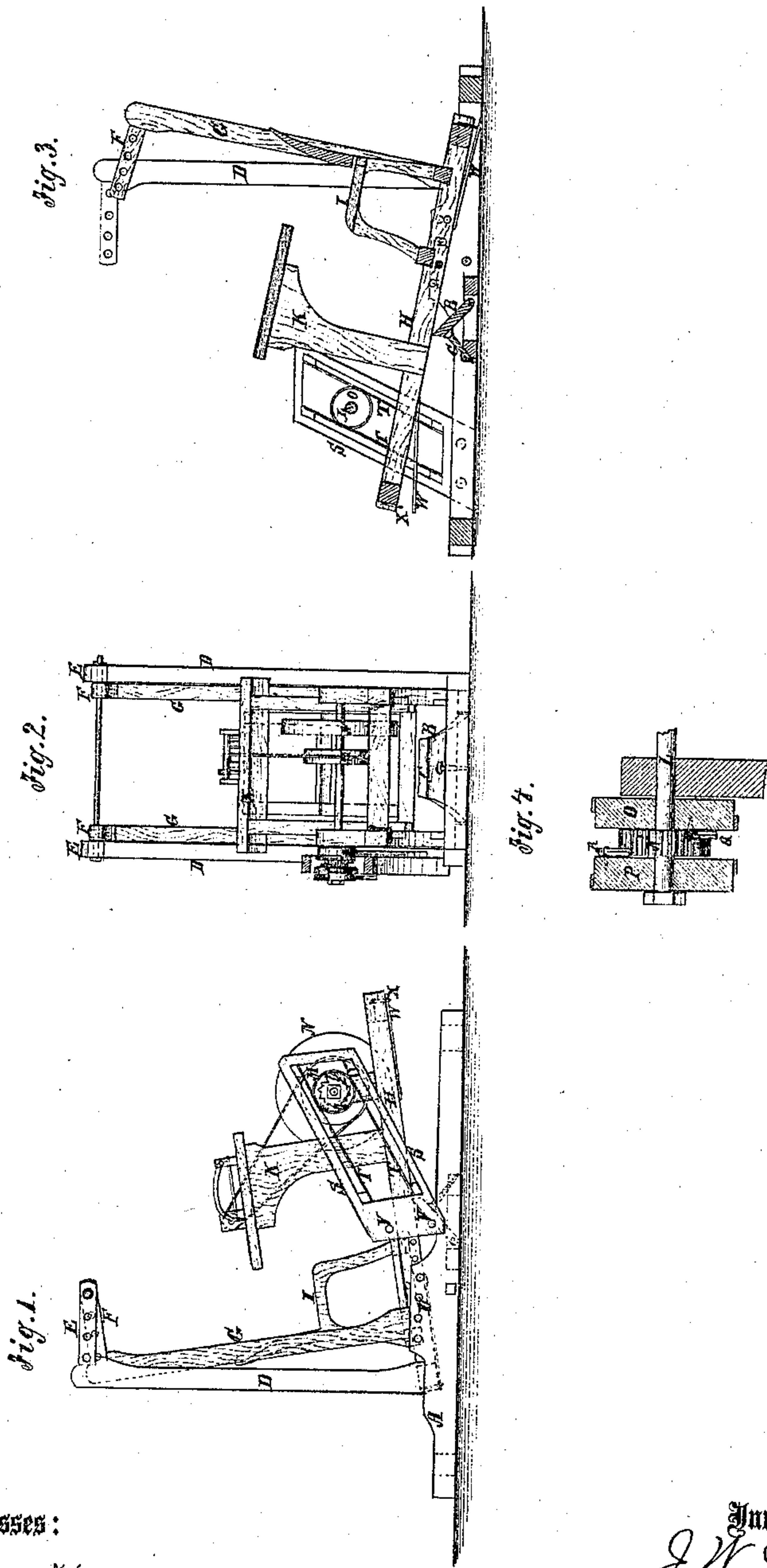


J. W. Jordan,

Treadle.

No. 103891.

Patented June 7, 1870.



Witnesses:

A. Remmele
L. S. Mabel

Inventor:

J. W. Jordan
PER *Munn & Co*
Attorneys.

UNITED STATES PATENT OFFICE

JOHN W. JORDAN, OF LEXINGTON, VIRGINIA.

IMPROVEMENT IN MOTIVE MECHANISM FOR SEWING-MACHINE.

Specification forming part of Letters Patent No. **103,891**, dated June 7, 1870.

To all whom it may concern:

Be it known that I, JOHN W. JORDAN, of Lexington, in the county of Rockbridge and State of Virginia, have invented a new and useful Improvement in Sewing-Machine Power; 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.

This invention relates to improvements in means for propelling sewing-machines; and consists in an apparatus for imparting rotary motion to a driving-shaft, mounted, together with the sewing-machine, on a rocking or swinging frame, either by rocking or swinging the said frame, to which motion is imparted by the operator mounted on the said frame in a suitable seat.

Figure 1 is a sectional elevation of the apparatus when adjusted to work by swinging. Fig. 2 is an end elevation, with one part sectioned. Fig. 3 is a sectional elevation of the same when adjusted for rocking.

Similar letters of reference indicate corresponding parts.

A represents a long, rectangular, or other formed bed-frame, composed of two side bars and suitable cross-bars, provided at about the center of a foot-piece, B, pivoted and arranged for adjustment by a set-screw, C. On the bed-frame are two high posts, D, with horizontal arms at the top, with holes or other means for attaching similar arms, F, of similar posts or hangers, G, on the bottom of which is attached a swinging or rocking frame, H, on which is placed a seat, I, a sewing-machine, K, and a counter-shaft, L, the latter having a driving-wheel, M, for driving the sewing-machine; also, a balance-wheel, a ratchet-wheel, N, and two loose pulleys, O P, having pawls Q R for working the ratchet-wheel. These pulleys work between parallel bars S, supported obliquely on the frame A, and have belts T working over them and connected at each end to the said parallel bars.

The belt of one pulley extends from the upper side along the upper parallel bar, and the belt of the other from the lower side, so that

when the frame H is suspended from the arms E, so as to swing back and forth and move the pulleys back and forth between the parallel bars, the pawl of one pulley moving in one direction will impart a forward movement to the ratchet-wheel, while the pawl of the other moves backward on the ratchet, and when the pulleys move in the other direction the forward motion of the ratchet-wheel will be kept up by the pawl of the other pulley.

The swinging motion is imparted to the frame H by the person sitting on the seat I forcing the frame backward by the foot placed over the foot-piece, and letting it swing forward by the action of gravity.

This swinging frame may be detached from the arms E and suspended on pivots placed in holes U in the side bars of the bed-frame and holes in the bars of the frame H; and in order to use it in this way, which may be preferred by some, I change the position of the parallel bars supporting the belts T from the position shown in Fig. 1 to that shown in Fig. 3, for which purpose it is attached by screws V, or by other suitable means adapted for ready connection and disconnection, the position of the said bars being such that the belts T are suspended in the direction in which the pulleys O P are caused to move by the swinging of the frame H in the one case and the rocking in the other case.

A number of holes, U, is made in the bars A, also in the bars of frame H, to vary the position of the pivot, as may be required.

The frame H may be suspended on any other suitable support, and the bars S may be attached to the floor.

The frame H is provided with springs W at each end, to be used when rocking for striking the floor or pins on the frame A, arresting the motion of the frame, and starting it in the opposite direction. These springs are held up to the bars when the frames swing by hooks X.

It is manifest that, instead of using the belts T for imparting motion to the pulleys, they may have teeth and gear with teeth on the bars S.

It is also obvious that when belts are used any other supports instead of the parallel bars may be used.

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

1. The combination, with the swinging frame, mounted in suitable supports and carrying a seat, a sewing-machine, and a counter-shaft, and pulley arranged to impart motion to the sewing-machine, of the pulleys O P, pawls Q R, ratchet-wheels N, belts T, and the belt-support, substantially as specified.

2. The combination, with the supporting-

frame A and frame H, pivoted together for the said frame H to have a rocking motion, of the parallel bars S, pulleys, ratchets, pawls, belts, and the counter-shaft L, all substantially as specified.

3. The combination, with the frames H, of the springs U, substantially as specified.

JOHN W. JORDAN.

Witnesses:

JAS. COMPTON,

J. J. WATSON.