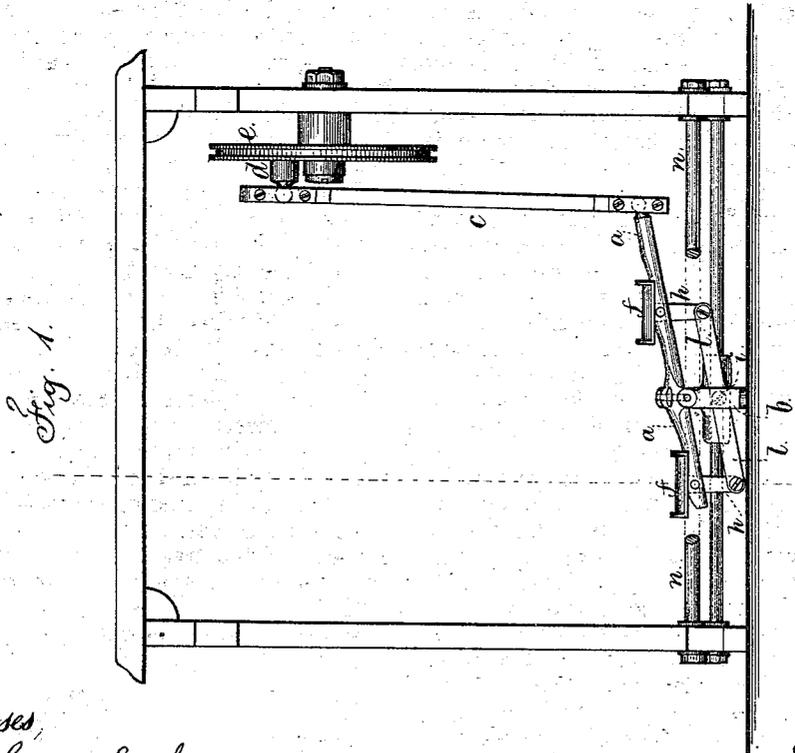
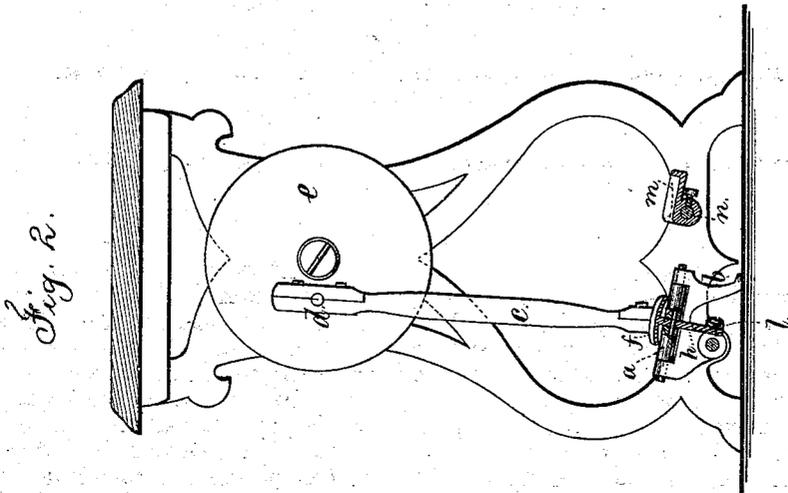


J. T. JONES.
Treadles for Sewing-Machines.

No. 154,256.

Patented Aug. 18, 1874.



Witnesses,
Chas. H. Smith
Harold Serrell

Inventor
John T. Jones.
per Lemuel W. Serrell
att.

UNITED STATES PATENT OFFICE.

JOHN T. JONES, OF ILION, NEW YORK.

IMPROVEMENT IN TREADLES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **154,256**, dated August 18, 1874; application filed April 7, 1874.

To all whom it may concern:

Be it known that I, JOHN T. JONES, of Ilion, in the county of Herkimer and State of New York, have invented an Improvement in Treadles for Sewing-Machines, &c., of which the following is a specification:

This device is made for allowing the position of the feet to be changed in relation to the treadle, so that the said treadle will be operated by the foot swinging upon the ankle-joint, or by the rise and fall of the foot and leg; thereby the operator can bring into action different muscles of the legs or body, as desired, thereby preventing too great fatigue of the person in consequence of the prolonged operation of the treadle by one character of movement. The treadles receive a rise-and-fall movement, and the heel-pieces remain in a fixed position; hence, when the foot rests upon both the heel-piece and the treadle, the latter will be operated by the forward part of the foot, and the movement will be principally at the ankle-joint. When the hollow of the foot rests upon the treadle, the movement of the foot and lower limb will be nearly vertical, and there will be but little motion at the ankle.

In the drawing, Figure 1 is an elevation of the forward portion of the treadle mechanism, and Fig. 2 is a cross-section of the same and of the rear portion or heel-rests.

The treadle-lever *a* is mounted upon a fulcrum-stand, *b*, of any suitable character, and from one end of the lever *a* the pitman *c* extends to the crank *d* of the fly-wheel *e*, or shaft to be revolved, the joints, by preference, being made as balls in recesses, so as to allow of the varying movements. The treadle-pieces *f* are above the lever *a*, and provided with vertical arms *h*, extending below the treadle-pieces, and pivoted to such lever *a*, and also connected at their lower ends to the parallel-motion bar *l*, that is parallel, or nearly so, to the lever *a*, and swings upon the fulcrum *i*.

It will now be evident that the arms *h* and bar *l* maintain the treadle-pieces *f* in a nearly horizontal position as they rise and fall with the lever *a*, as the parts are actuated by the feet resting upon such treadles.

The heel-pieces *m* are separate from the treadles, and are attached upon the cross-bar *n*, and either receive a limited rocking motion thereon, or else are rounding upon their upper surfaces, so as to allow the heel to rest upon such supports *m*, and the front part of the foot to be moved freely, the principal motion being at the ankle-joint, or else, when the foot is moved farther forward, and the hollow portion thereof rests upon the treadles *f*, the heel is clear of these heel-pieces, and the foot and leg move up and down freely in operating the treadles, there being but little motion at the ankle-joint.

By this construction the operator is enabled to use either one movement or the other in actuating the treadles, so as to avoid fatigue.

I claim as my invention—

1. The rocking lever *a*, connected to the crank or fly-wheel by the pitman *c*, in combination with the treadles *f* and parallel-motion bar *l*, substantially as set forth.

2. The heel-pieces *m*, separate from the moving foot-pieces or treadles, in combination with the rocking lever *a*, to which the treadles are connected, substantially as set forth.

3. The sewing-machine treadle made in two pieces, one of which forms a heel-rest, independent of the treadle-piece that receives a rise-and-fall movement, substantially as set forth.

Signed by me this 23th day of March, A. D. 1874.

JOHN T. JONES.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.