

LEO. W. SAPP.

Improvement in Treadles for Sewing Machines.

No. 124,857.

Patented March 19, 1872.

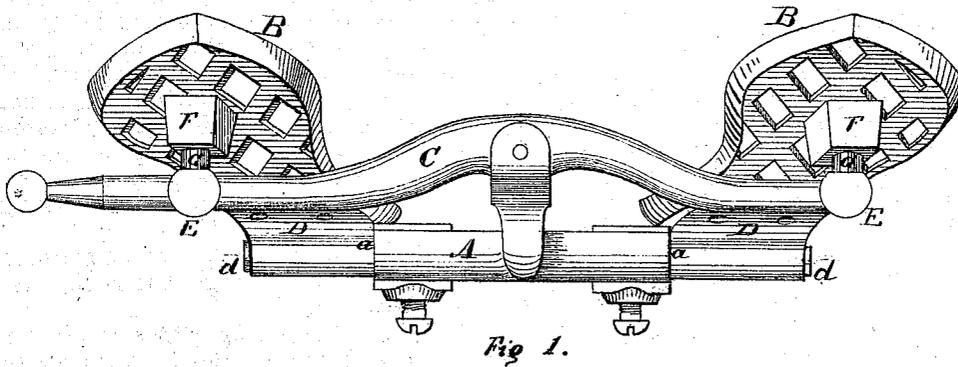


Fig 1.

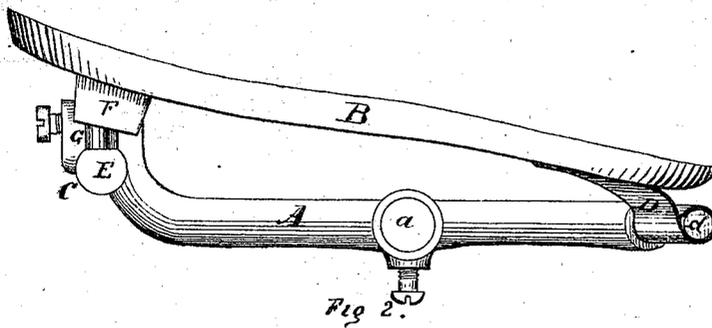


Fig 2.

WITNESS.

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# UNITED STATES PATENT OFFICE.

LEO W. SAPP, OF CLEVELAND, OHIO.

## IMPROVEMENT IN TREADLES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 124,857, dated March 19, 1872.

### SPECIFICATION.

I, LEO W. SAPP, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain Improvements in Sewing-Machine Treadles, of which the following is a specification.

These improvements relate to the manner of constructing the heel-joint or attaching the heels of the treadles to the treadle-frame; also, in the manner of making the connections at the toes of the treadles with the rocking-lever. These features are fully set forth in the following description and accompanying drawing, in which—

Figure 1 is a front elevation of my improved treadle, showing the connections of the treadles with the rocking-lever. Fig. 2 is a side elevation of the same, showing the manner of connecting the heels of the treadles with the supporting-frame.

A represents a frame for supporting the treadles B B and rocking-lever C. The frame A is secured to the front stretcher of a sewing-machine table, through the holes *a* made in the frame for that purpose, the set-screws holding it firmly in place. To the rear side of the frame are two pins, *d d*. The foot-treadles B B have secured to them, under the heels, a spring plate, D, which is bent in the form of a tube at the end, and which is placed on the pins *d d*, and secured in place by small pins or screws. These spring plates, by their elasticity, constitute the heel-joints of the treadles B B. The rocking-lever C is pivoted at the middle to an arm of the frame A; and at the

points of connection with the toes of the treadles B B are sockets E E, the treadles having corresponding sockets F F. In the sockets are secured short pieces of rubber, G G, which form the connections of the treadles with the lever. The elasticity of the rubber yields to the play of the treadles and lever.

By this method of construction all friction of the joints is overcome. There is neither any lost motion nor wearing of the joints. The springs for the heel-joints also tend to keep the treadles on the same plane or level when they are not in motion, and they assist materially in causing the crank to pass the center, and will not stop at that point but invariably stop with the crank at right angles from the center. It is also perfectly noiseless, there being no parts that rub or strike together, and only one place that requires oiling, that being the middle joint of the rocking lever C.

The pieces of rubber might be substituted with short spiral springs, but rubber is the most convenient.

1. I claim the spring plates D D, in combination with the treadles B B, substantially as and for the purpose set forth.

2. I claim the elastic connections G G, in combination with the treadles B B and the rocking-lever C, substantially as and for the purpose set forth.

LEO W. SAPP, M. D.

Witnesses:

SAML. FOLJAMBE,  
H. L. HOFFMAN.