CHARLES A. FOSTER.

Improvement in Sewing Machine Treadles.

No. 123,775. Patented Feb. 20, 1872.

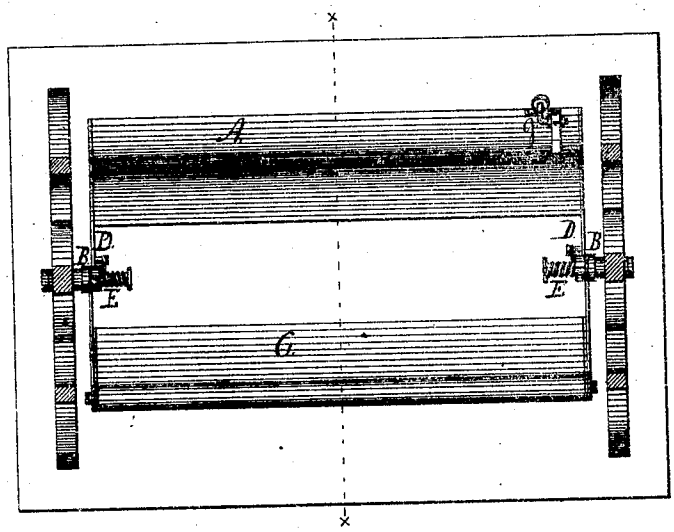

FIG. 1.

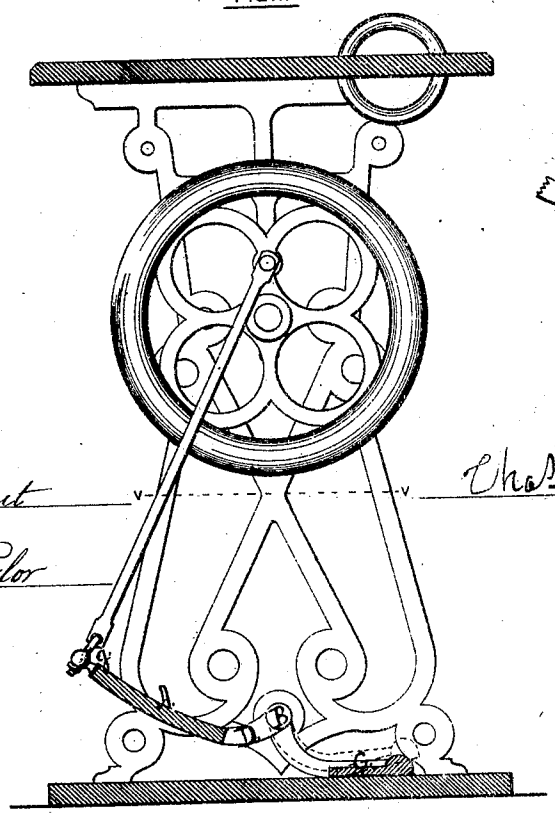

FIG. 2.

FIG. 3.

WITNESSES.

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CHARLES A. FOSTER, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN SEWING-MACHINE TREADLES.

Specification forming part of Letters Patent No. 123,775, dated February 20, 1872.

To all whom it may concern:

Be it known that I, CHARLES A. FOSTER, of the city and county of Providence, in the State of Rhode Island, have made certain new and useful Improvements in "Sewing-Machines;" and I do hereby declare that the following specification, taken in connection with the drawing making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a top view of treadle, horizontal section on line *v v*. Fig. 2 is a cross-section of machine on line *x x*. Fig. 3 is a view of the joint of treadle.

My invention relates to the construction, arrangement, and operation of the treadle of a sewing-machine, and the manner of attaching it to the pitman; and consists in the improvements hereinafter described.

In the drawing, A, Figs. 1 and 2, is the treadle, which extends nearly the whole length of the machine, and is attached to and works upon fulcrums B B, in the manner hereinafter described. C is a heel-rest, which rests upon the floor, or may be secured at such an angle as suits the operator, and is likewise attached to the said fulcrum B B by means of suitable arms. I attach the treadle to the fulcrums B B by means of the arms D D, the ends of which are so shaped as to clasp said fulcrums, and are securely held in that position by the spiral springs E E, as shown in Fig. 3.

The operation of my invention is as follows: Place the feet, the heels upon the rest C, which is provided with a ridge, F, which prevents their slipping back, and the forward part of the feet upon the treadle A. This position of the feet is both easy and natural. The treadle being much nearer the floor than those in the machines now in use avoids that cramping of the limbs which operators usually experience.

To start the machine, press upon the treadle with the forward part of the foot, overcoming the resistance of the spiral springs, which have the effect to keep the treadle in contact with the feet at all times, thus rendering unnecessary the usual toe-strap, the entire movement of the treadle being completed with ease without raising the heel from the rest.

In my device I greatly reduce the friction usual in all sewing-machines. The arms D D bearing only upon the under side of the fulcrums B B, the pressure and weight of the feet upon the treadle, instead of increasing the friction, as in other machines, diminishes it. It being often desirable to raise or lower the treadle to suit different operators and adjust the machine, I attach the pitman to a rod, *g*, which is attached to the treadle by means of a screw, so that by removing the pitman the rod *g* may be lengthened or shortened by turning it, and the pitman replaced.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The spring-joint, composed of the spring E and fulcrum B, in combination with the treadle A and rest C, the whole constructed and operating in the manner substantially as described, for the purposes specified.

2. The springs E E, in combination with the treadle A and fulcrums B B, for the purpose of keeping said treadle in contact with the feet, substantially as described.

CHAS. A. FOSTER.

Witnesses:

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