

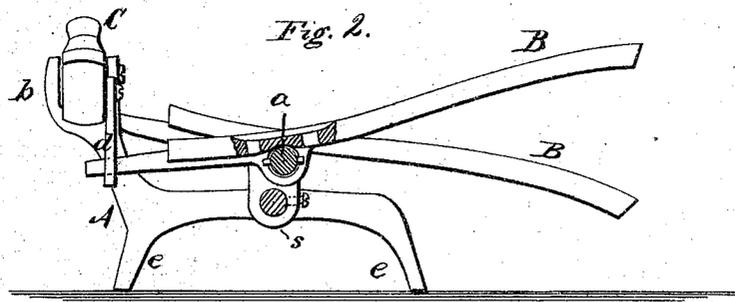
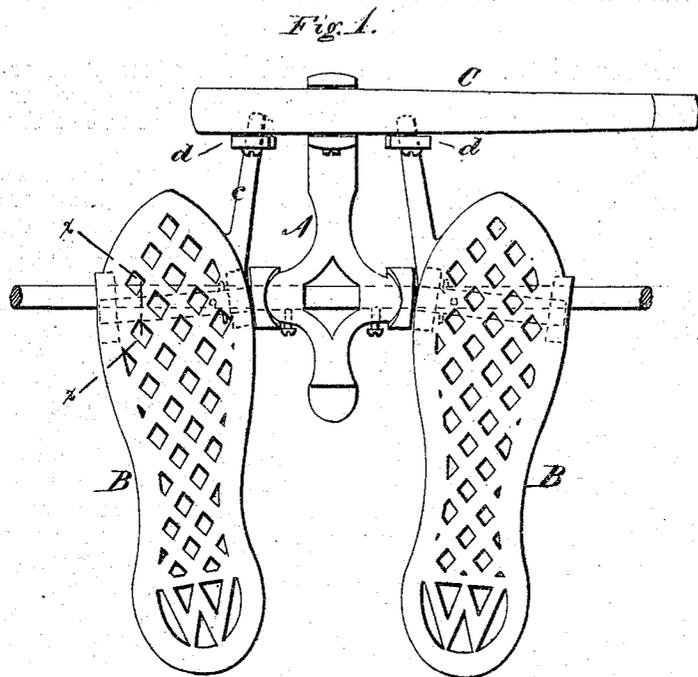
(134.)

J. H. WHITNEY.

Improvement in Treadles for Sewing Machines.

No. 122,422.

Patented Jan. 2, 1872.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN H. WHITNEY, OF ROCHESTER, MINNESOTA.

IMPROVEMENT IN TREADLES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 122,422, dated January 2, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, JOHN H. WHITNEY, of Rochester, in the county of Olmsted and State of Minnesota, have invented certain Improvements in Treadles for Sewing-Machines, &c., of which the following is a specification, reference being had to the accompanying drawing.

The object of my invention is to produce a treadle for driving sewing-machines and for similar purposes, which may be operated with greater ease and without the injurious effects of those now in general use. Treadles, as ordinarily arranged, are either pivoted at their middle, so that a rocking toe-and-heel motion of the feet is necessary, or else pivoted at their back ends, so that the motion is produced entirely by the toes; and generally they are so arranged that both feet must move together. In either case an unnatural motion of the foot is required, and muscles brought into play which are not otherwise used, the result of which is that the operation is very fatiguing, and also, to females and persons of delicate constitutions, very injurious. My invention consists in pivoting the two treadles or sandals at their toes and connecting them to a vibrating bar so as to move alternately, whereby I produce a motion of the feet very similar to that in walking, and bring into play those muscles which may be used for a long time without fatigue or injury.

In the drawing, Figure 1 is a plan view of a pair of treadles arranged on my plan, and Fig. 2 is a side view of the same with a portion broken away, as indicated by the dotted lines in Fig. 1.

A represents an iron base or support provided with two feet, *e*, to rest upon the floor, and with a rear arm, *b*, and two horizontal journals or arms, *b*, on opposite sides. B are the treadles or sandals, mounted at or near their toes upon the journals *b* of the base, each treadle being formed with an arm, *c*, at its front end. C is a vibrating lever, pivoted near one end to the arm *b* of the base, and provided

on each side of its pivot or fulcrum with a plate or link, *d*, through the lower ends of which links the arms *c* of the respective treadles pass, as shown.

The parts being thus arranged, it will be seen that upon depressing the heel of the right-hand treadle its arm *c* will tip the lever C and throw the outer end of the same up, and that upon depressing the heel of the left-hand treadle it will tip the lever C in the opposite direction and throw its end down. As the end of one treadle descends the end of the other is raised by the lever C, so that the two treadles must move alternately, so that when operated they throw the end of the lever C up and down. The lever has its end connected by a pitman with the crank-shaft of the machine to be operated so as to communicate motion thereto.

To facilitate the application of the treadles to sewing-machines, especially those already in use provided with treadles of the ordinary arrangement, I provide the base A with perforated ears *s*, which may be slipped onto the usual treadle-shaft, the ears being provided with set-screws for fastening them in place, as shown. It will be observed that with my treadles the whole pressure is applied and the work done by the heels of the operator, and that the treadles, instead of moving together, move alternately, by which arrangement they are rendered easy of operation and injury to the operator avoided.

Having thus described my machine, what I claim is—

1. The treadles B, pivoted at their forward ends, and provided with arms *c*, in combination with the vibrating lever C, when arranged to operate as described.

2. In combination with the treadles B and lever C, the base or support A, provided with ears *s* for attaching it to the ordinary sewing-machine, as set forth.

JOHN H. WHITNEY.

Witnesses:

A. J. WRIGHT,
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