A. H. WAGNER.

Improvement in Treadles for Sewing Machines.

No. 125,103. Patented March 26, 1872.

Fig. 1.

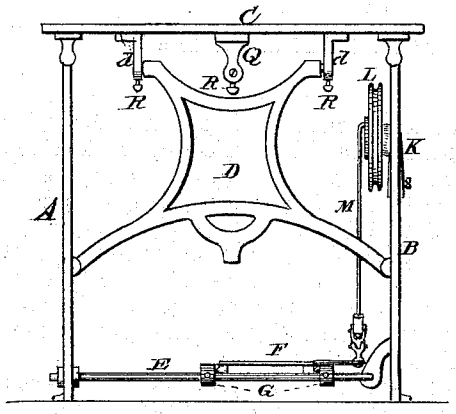


Fig. 2.

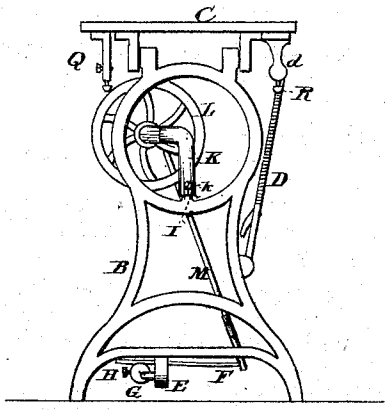


Fig. 3.

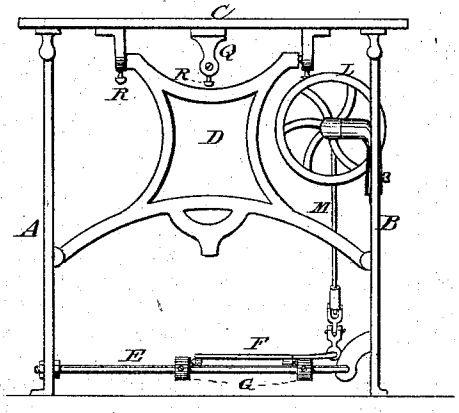


Fig. 4.

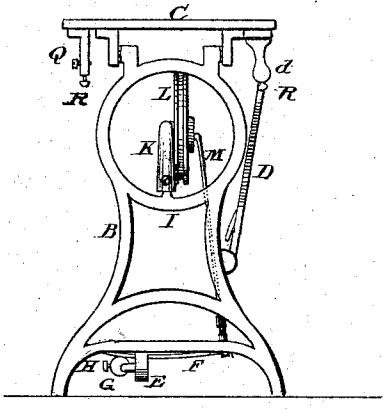


Fig. 6.

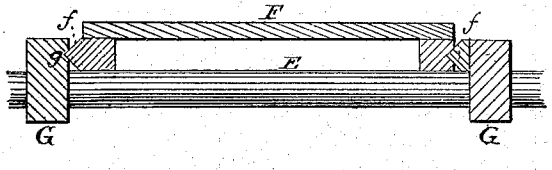


Fig. 7.

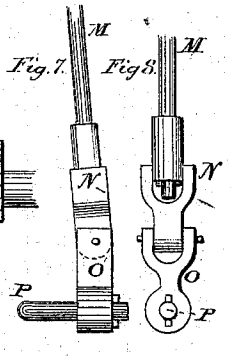
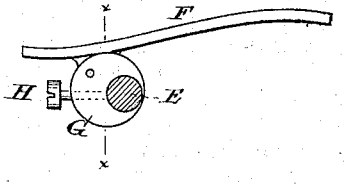


Fig. 8.

Fig 5.



Witnesses.

A. Poole

John R. Young

Inventor.

A. H. Wagner, by Crindle and Co. his Attys.

UNITED STATES PATENT OFFICE.

AUSBERT H. WAGNER, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN TREADLES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 125,103, dated March 26, 1872.

To all whom it may concern:

Be it known that I, AUSBERT H. WAGNER, of Chicago, in the county of Cook and in the State of Illinois, have invented certain new and useful Improvements in Sewing-Machine Tables; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figures 1 and 2 are, respectively, a front and an end elevation of my improved treadle as arranged for sewing-machines which have their driving-wheels rotate in a plane parallel to a line extending from front to rear. Figs. 3 and 4 are similar views of said treadle with the driving-wheel arranged so as to rotate in a plane parallel with a line extending longitudinally through the table. Fig. 5 is a side elevation of the treadle and its pivotal bearing. Fig. 6 is a vertical cross-section of the same on the line *x x* of Fig. 5; and Figs. 7 and 8 are, respectively, a side and a rear elevation of the swiveled connecting-rod.

Letters of like name and kind refer to like parts in each of the figures.

My invention is an improvement upon a folding sewing-machine table for which Letters Patent were granted me on the 29th day of August, 1871, and upon the 16th day of January, 1872, (Nos. 118,655 and 122,747, respectively;) and it consists principally in a driving-wheel so attached to or upon a table as to be capable of operation in a vertical plane parallel with or at a right angle to a line passing from front to rear, substantially as and for the purpose hereinafter specified. It consists, further, in the especial means employed for connecting the driving-wheel to or with the frame of the machine, substantially as and for the purpose hereinafter shown. It consists, further, in the peculiar construction of the hinged and swiveled connecting-rod employed for communicating the motion of the treadle to the driving-wheel, substantially as and for the purpose hereinafter set forth. It consists, further, in the means employed for pivoting the treadle to or upon the cross-bar, and for rendering the axial bearings of said treadle adjustable vertically or from front to rear, substantially as and for the purpose hereinafter shown and described. It consists, finally, in the studs or pins which project downward from and form bearings for the frame when the latter is folded together, substantially as is hereinafter specified.

As the general construction of the supporting portions of this table is the same as in the patented tables above named, it is not deemed necessary to specifically describe them or their operation.

In the annexed drawing, A and B represent two legs hinged to or upon a table, C, and connected together by means of a rear frame-brace, D, and a brace-rod, E, which latter extends between the lower ends of said legs and forms a support for the treadle F. The treadle F is placed entirely above the rod E, and provided with two conical points or studs, *f*, which extend horizontally and laterally outward from opposite sides and fit into corresponding sockets, *g*, formed within the contiguous sides of two collars, G, which fit loosely over said rod, and are each held in place thereon by means of a set-screw, H. If desired, the conical pivots may be affixed to and form a part of the collars, and the sockets be formed within the edges of the treadle; but in either case the effect will be the same—viz., the production of comparatively frictionless bearings for and upon which the treadle turns, which bearings may be easily and quickly adjusted so as to take up any lost motion caused by wear. In order that the vertical position of the treadle may be varied within certain limits, or said treadle may be adjusted toward or from the rear, the collars G are made eccentric, and the bearings for said treadles placed within their widest portion. Extending vertically upward from the vertical and horizontal center of the leg B is a stud, I, upon which is swiveled a hollow arm, K, that, immediately above the upper end of said stud, extends horizontally outward, as seen in Figs. 2 and 3. A set-screw, *k*, passing inward through the vertical portion of the arm K, bears against the stud I and secures said arm in radial position, while upon the outer end of the latter and against its side is journaled a driving-wheel, L, of usual construction. The rod M, for connecting the treadle and driving-wheel, has its upper end constructed and pivoted to or upon the wheel

in the usual manner, but at its lower end is swiveled within a sleeve, N, which is pivoted immediately beneath to or within a short connection, O, which at its lower end is journaled to or upon an arm, P, that extends rearward from one side of the treadle, the pivotal joint between the lower end of said sleeve N and the upper end of said connection O having a movement in a line at a right angle to the movement of said connection O upon the arm P. As thus arranged, it will be seen that when the driving-wheel is placed in the position shown in Figs. 1 and 2 the connection O does not turn upon the arm P; but the fore-and-aft motion of the upper end of the rod M causes the sleeve N to oscillate upon its bearing within the upper end of said connection O, while, upon turning said driving-wheel to the position shown in Figs. 3 and 4, the movement of said rod causes said connection O to turn upon its bearing, and the fore-and-aft movement of the lower end of said rod produced by the motion of the treadle upon its bearings produces a slight movement of the joint between said connection and sleeve, thus enabling said driving-wheel to be adjusted and operated in any position which may be necessary in order to accommodate different styles of machines. When the legs and braces are folded together it has been found that the paint upon the outer side of the former is liable to injury by resting upon a floor or by pressing against a box while being transported. To obviate this difficulty I secure within each of the lugs *d* of the rear brace and the fastening-lug Q dependent from the front side of the table a stud or pin, R, which extends vertically downward beyond any portion of the mechanism. When folded together and in connection with the other pins it forms a bearing for and sustains the weight of the table so as to prevent any of its parts from coming in contact with the surface upon which the device may rest.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. In a sewing-machine table, a driving-wheel so arranged as to be capable of operation in a vertical plane parallel with or at a right angle to a line passing from front to rear, substantially as and for the purpose specified.

2. The means employed for connecting the driving-wheel to or upon the frame and for rendering the same adjustable thereon, consisting of the stud I, the hollow angular arm K, and set-screw *k*, substantially as shown.

3. In combination with a treadle and driving-wheel capable of adjustment to and operation in two planes having relative angles of ninety degrees, a connecting-rod provided with a swivel-joint and a hinge-joint, having its line of motion at a right angle to the line of motion of its lower or journaled end, substantially as and for the purpose set forth.

4. A sewing-machine treadle supported by and oscillating upon two conical pivots, substantially as and for the purpose shown and described.

5. A sewing-machine treadle pivoted to or between two collars which encircle the cross-rod supporting said treadle, and are capable of adjustment thereon radially and longitudinally, substantially as and for the purpose specified.

6. The studs or pins R, secured within and extending below the frame of the machine when said frame is folded together, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of February, 1872.

AUSBERT H. WAGNER.

Witnesses:
E. D. SWAN,
W. S. SWAN.