

H. C. SMITH.

Improvement in Treadle for Sewing Machines.

No. 120,401.

Patented Oct. 31, 1871.

Fig. 1.

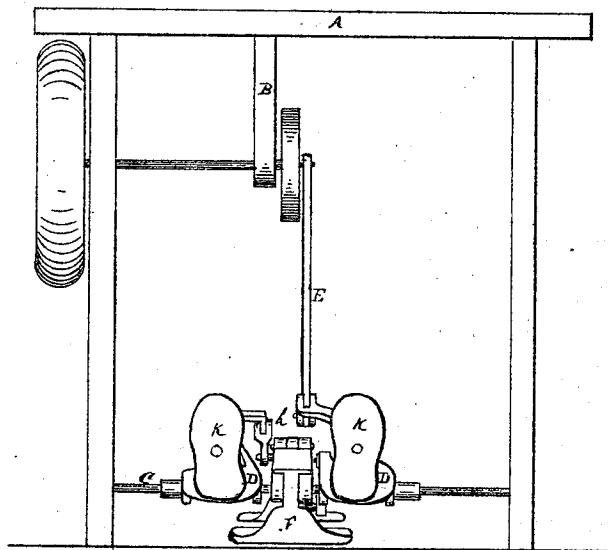


Fig. 2.

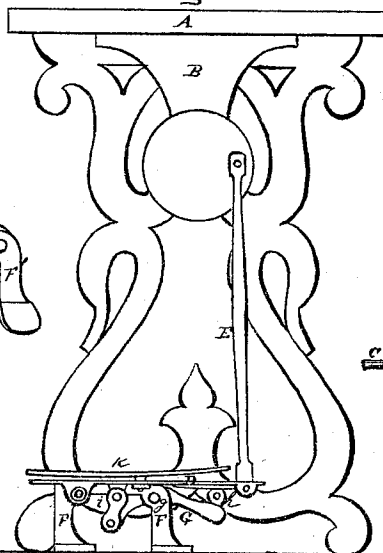


Fig. 4.

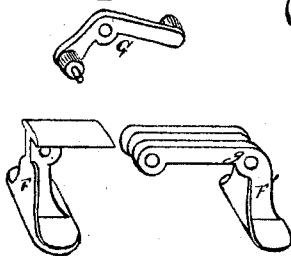
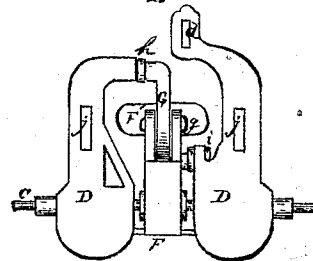


Fig. 3.



WITNESS,

G. W. N. Smith
W. Sweet

INVENTOR.

H. C. Smith

UNITED STATES PATENT OFFICE.

HENRY C. SMITH, OF CLEVELAND, OHIO.

IMPROVEMENT IN TREADLES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 120,401, dated October 31, 1871.

To all whom it may concern:

Be it known that I, HENRY C. SMITH, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and Improved Sewing-Machine Treadle, of which the following is a specification:

The nature of this invention relates to a combination and arrangement of a bent oscillating lever situated between the foot-treadles and supported by a standard, and is connected with each of the foot-treadles so that in the alternate motion the one treadle throws up the other.

In the drawing, Figure 1 is a front view of a sewing-machine table having my treadle attached. Fig. 2 is an end view of the table with leg removed. Fig. 3 is a top or plan view of my improved treadle. Fig. 4 is a detached view of the oscillating lever and its supports.

A is a table top, depending from which is a bracket, B, which supports the shaft of the driving-wheel. To the rod, C stretched across the lower part of the table, I attach two levers, D D, pivoting them so that they may have motion, the right hand one extending forward a little beyond the other, and having a socket, *d*, to which is attached a pitman, E, connecting it with the crank on the shaft above. Between the levers D D, and attached to the rod C, are supports F F', the first one F slipping into the second F', and are locked together by the rod C. In the support F' is arranged a bent oscillating lever, G, pivoted at *g*. The forward end of the lever G is connected by

a link, *h*, to the front end of the left-hand lever D, and the rear end is connected to a short arm on the right-hand lever D by a link, *i*. The forward end of the lever G is made longer than the rear end, so that the power shall be equal to resistance necessary to be overcome in the raising of the opposite lever D. By this construction there is equal compensation given to either of the treadles D D. A slot, *j*, is made in the levers D D, for the purpose of attaching slippers or foot-pads K K, which may be adjusted back and forth, as may be desired, by means of a set-screw on the under side. The foot-levers D D may be constructed in the form of the foot-pads K K and the loose or adjustable ones dispensed with, if desired.

By this mode of constructing a sewing-machine treadle a very compact, easy-working, and steady reciprocating treadle is obtained. It is not liable to get out of order, and is situated where it will not interfere with any of the other machinery on the table.

I claim—

The foot-levers D D, the supports F F', the oscillating lever G connected by the links *h* and *i* to the levers D D, when the same are constructed, arranged, and combined to operate substantially as described and for the purpose set forth.

H. C. SMITH.

Witnesses:

GEO. W. TIBBITS,
N. S. SWEET.

(134)