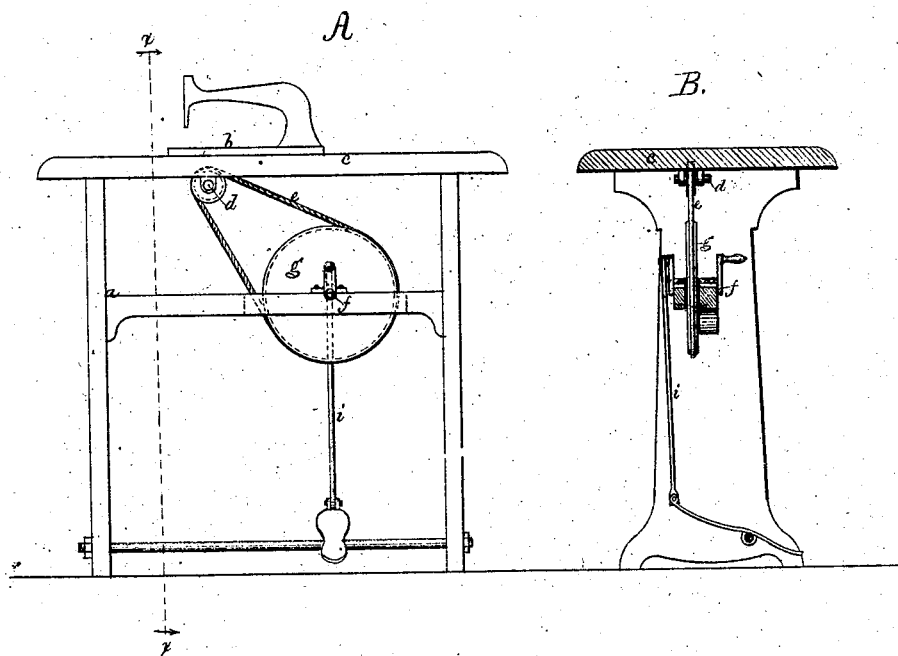


John Cochrane Jr.
Imp't in Sewing Machine Driving Mechanism.

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PATENTED AUG 30 1870



John Cochrane Jr.
by his atty.

Crosby, Halsted & Gould

Witnesses
J. B. Kidder
W. W. Frothingham.

United States Patent Office.

JOHN COCHRANE, JR., OF MALDEN, MASSACHUSETTS.

Letters Patent No. 106,781, dated August 30, 1870.

IMPROVEMENT IN DRIVING MECHANISM FOR SEWING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN COCHRANE, JR., of Malden, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Sewing-machine Driving Mechanism; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

Although sewing-machines are sometimes made to be run by hand, almost all kinds of sewing-machines are mounted upon tables and have their driving-shafts actuated by treadle, or foot-driven shafts placed beneath the table; the shaft that immediately drives the sewing-machine mechanism being belted to the treadle-driven shaft, the work-supporting plate of the sewing-machine generally resting directly on the table of the treadle-frame.

Sometimes, however, an ordinary hand-driven machine is mounted upon a table and belted to the crank-shaft beneath the table, so that the machine may be either driven by hand, (applied to the crank-handle extending from the shaft above the table,) or by the foot applied to the treadle beneath.

It is well known that it is very tiresome to many women, and injurious to many, to drive sewing-machine treadles, but, where a machine that can be driven by hand is mounted upon a table, and connected with a treadle mechanism beneath the table, it is impractical to alternately run such a machine by hand and foot, as the handle above the table is in an inconvenient position to be reached by either hand while the other guides the work.

The object of my invention is to provide a means for running a treadle-driven sewing-machine by hand as well as by foot-power, through the agency of the hand applied beneath the table; and

My invention consists in combining, with a treadle mechanism beneath a sewing-machine table, a handle or hand-crank applied to or connected with the treadle-driven shaft, (beneath the table,) so that the sewing-machine may be actuated by the hand applied be-

neath the table, as well as by the foot applied to the treadle-lever.

The drawing represents a sewing-machine frame and table with a treadle and treadle-shaft and sewing-machine shaft embodying my improvement.

A denotes a side elevation, and

B a sectional elevation of the mechanism.

a denotes the sewing-machine frame, the work-supporting plate *b* of which rests directly on the table *c*, the shaft *d* being belted by a band, *e*, to a shaft, *f*, or to a fly-wheel, *g*, upon said shaft.

h denotes the treadle connected to the crank of the treadle-shaft *f* by a connecting-rod, *i*, in the usual manner.

The shaft *f* is supported and rotates in suitable bearings, and, beyond one of these bearings the shaft is extended to form a crank or handle, *k*, by which the treadle-shaft may be readily operated by the hand applied beneath the table to this handle, so that when the foot of the operator becomes tired, the machine may still be run without obstructing the free movement of the work, by applying the hand above the table.

The work-supporting plate *b* is shown as sitting directly upon the table, but, it will be obvious that the improvement is equally applicable to machines where the sewing mechanism is contained in a frame standing upon the table.

It will also be obvious that the handle *k* may be applied to a treadle-driven shaft running lengthwise of the frame *a*, as well as to a shaft running transversely, as seen in the drawing.

I claim—

In combination, with a sewing-machine mounted upon a table and having a treadle or foot-driven mechanism, by which to operate the machine, a hand-crank connected with the treadle-operated crank-shaft, and placed beneath the table or on the treadle-operated crank-shaft, substantially as described.

Witnesses:

J. B. CROSBY,

FRANCIS GOULD.

JOHN COCHRANE, JR.