

(No Model.)

2 Sheets—Sheet 1.

P. DIEHL & T. KRAEMER.
SEWING MACHINE TREADLE.

No. 568,717.

Patented Sept. 29, 1896.

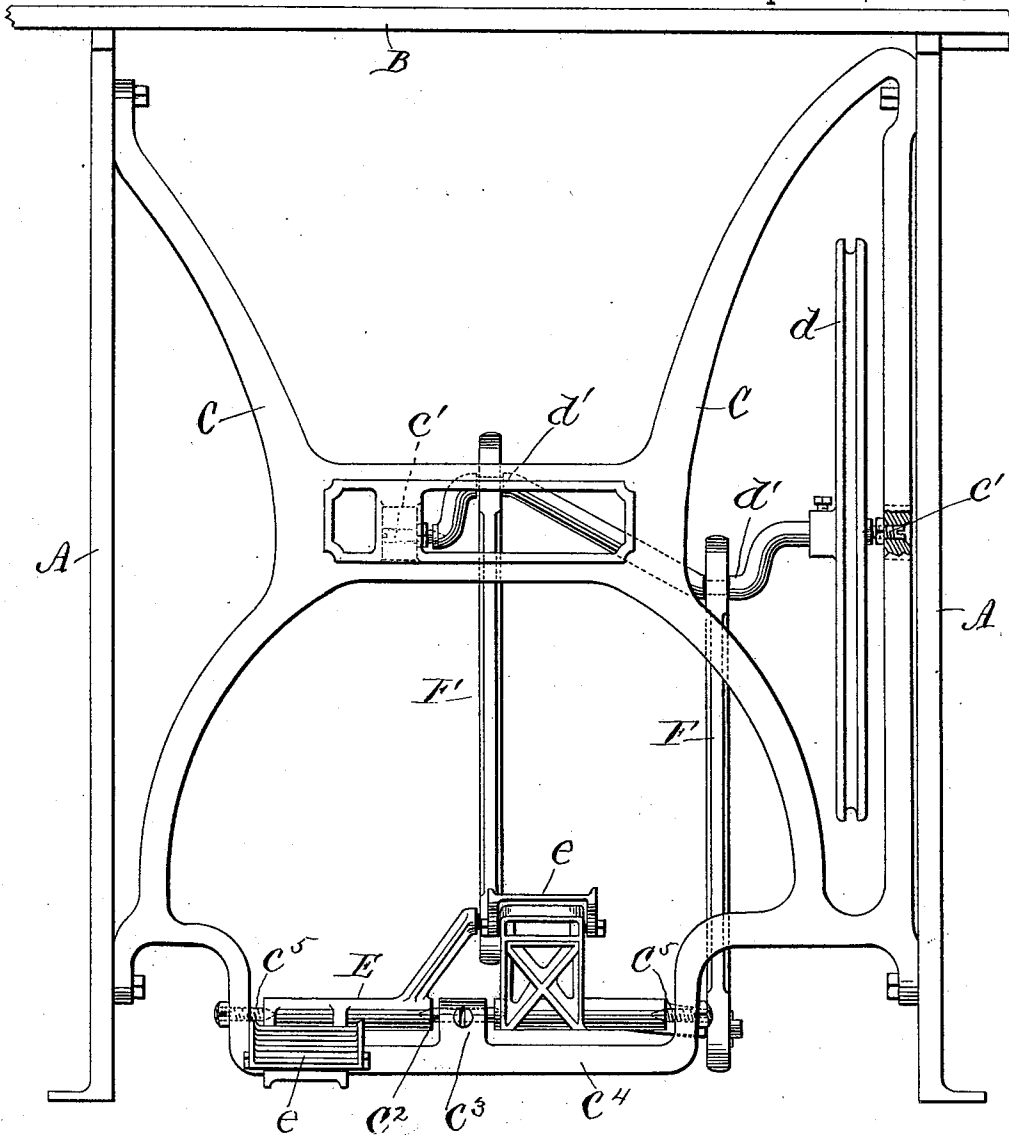


Fig. 1.

WITNESSES:

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C. M. Sweeney

INVENTORS:

Philip Diehl & T. Kraemer
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Fig. 2.

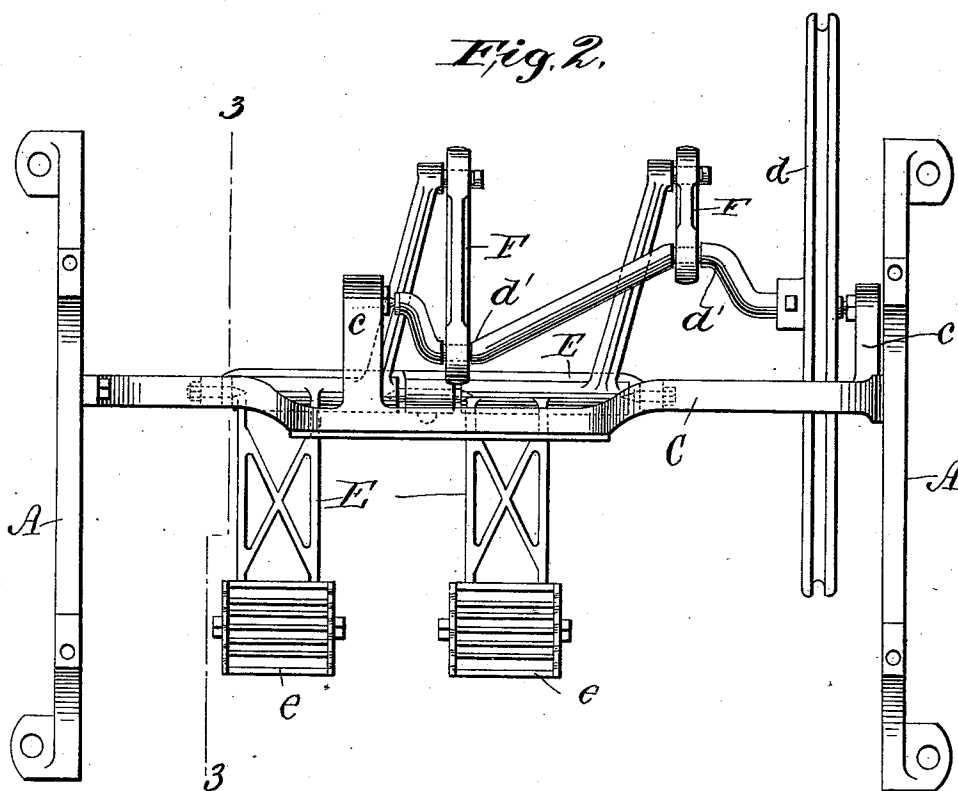
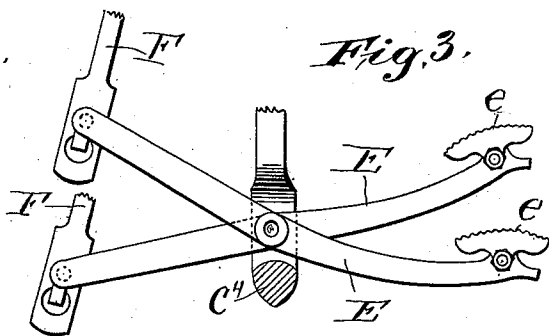


Fig. 3.



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UNITED STATES PATENT OFFICE.

PHILIP DIEHL AND THOMAS KRAEMER, OF ELIZABETH, NEW JERSEY,
ASSIGNORS TO THE SINGER MANUFACTURING COMPANY, OF NEW
JERSEY.

SEWING-MACHINE TREADLE.

SPECIFICATION forming part of Letters Patent No. 568,717, dated September 29, 1896.

Application filed April 28, 1896. Serial No. 589,451. (No model.)

To all whom it may concern:

Be it known that we, PHILIP DIEHL and THOMAS KRAEMER, citizens of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Sewing-Machine Treadles, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention has for its object to provide a treadle mechanism for sewing-machines and the like by means of which an operator is enabled to drive a machine at a high speed and with a minimum expenditure of power, and in which all of the treadle mechanism and also the driven crank-shaft will be supported by the brace which connects the legs or side frames of the stand or table. To this end we provide the said brace with suitable supports or lugs on which a crank-shaft having two cranks and a pulley or driving-wheel is mounted, preferably by center screws, and to the lower part of the said brace we pivot two treadle-levers, which are connected by two pitmen with the two cranks of the driving-shaft. The treadle-levers are preferably provided with pivoted or rocking foot-pieces having convex and corrugated upper surfaces.

In the accompanying drawings, Figure 1 is a front elevation of a sewing-machine stand embodying our invention. Fig. 2 is a plan view of the same with the table omitted. Fig. 3 is a detail section on line 3 3 of Fig 2.

A denotes the legs or side frames of the stand, supporting the table B, on which the sewing-machine or other similar machine to be driven is mounted. C is the cross-brace, bolted at its upper and lower ends to the said legs or side frames and serving to hold the latter strongly and accurately in place. The brace C is provided at its rear side with rearwardly-projecting arms or lugs *c*, by which is supported, preferably by center screws *c'*, the double crank-shaft carrying the driving wheel or pulley *d*.

E denotes the twin treadles or treadle-levers, pivotally supported in the lower part of the brace C, said levers, as herein shown, being hung on center screws *c''* and on a double

cone-pointed pin *c''*, held in a lug *c''* on the lower cross-rod *c''* of the brace, and being preferably provided at their forward or operating ends with pivoted foot-pieces *e*, having corrugated and convex upper surfaces. The rear arms of the treadle-levers are connected by pitmen F with the two cranks *d'* of the driving or crank shaft.

It will thus be seen that the entire treadle mechanism, comprising the alternately-working treadles and the double crank-shaft operated therefrom, is supported by the brace, so that all of the parts of said mechanism will always maintain their relative positions unaffected by any springing or warping of the table B, which might disturb such relative arrangement were the double treadles or the crank-shaft mounted in the legs or side frames of the stand, or on rods or parts connected therewith.

It will also be seen that the arms or lugs *c'*, projecting rearwardly from the brace C about midway of the height thereof, afford means for supporting the double crank-shaft clear of the brace, so that there will be room for said shaft to work behind said brace, and without requiring said shaft to be lowered to a point which would be objectionable.

Having thus described our invention, we claim and desire to secure by Letters Patent—

1. The combination with the legs or side frames A, and the brace C connecting the same and provided with the rearwardly-projecting arms or lugs *c*, of the crank-shaft supported by said arms or lugs behind and clear of said brace and having the wheel or pulley *d* and two cranks *d'*, the two treadle-levers E, mounted in the lower part of said brace, and the pitmen connecting said levers with said cranks.

2. The combination with the legs or side frames A, and the brace C connecting the same and provided with the rearwardly-projecting arms or lugs *c*, of the crank-shaft supported by said arms or lugs behind and clear of said brace and having the wheel or pulley *d* and two cranks *d'*, the two treadle-levers E, mounted in the lower part of said brace, and

the pitmen connecting said levers with said cranks, said treadle-levers having the pivoted foot-pieces *e*.

3. The combination with the legs or side
5 frames A, and the brace C connecting the same and provided with the rearwardly-projecting arms or lugs *c*, of the crank-shaft supported by said arms or lugs behind and clear of said brace and having the wheel or pulley
10 *d* and two cranks *d'*, the two treadle-levers E mounted, in the lower part of said brace, and

the pitmen connecting said levers with said cranks, said treadle-levers having the pivoted foot-pieces *e* having convex and corrugated or roughened upper surfaces. 15

In testimony whereof we affix our signatures in presence of two witnesses.

PHILIP DIEHL.

THOMAS KRAEMER.

Witnesses:

HENRY CALVER,

JOSEPH F. JAQUITH.