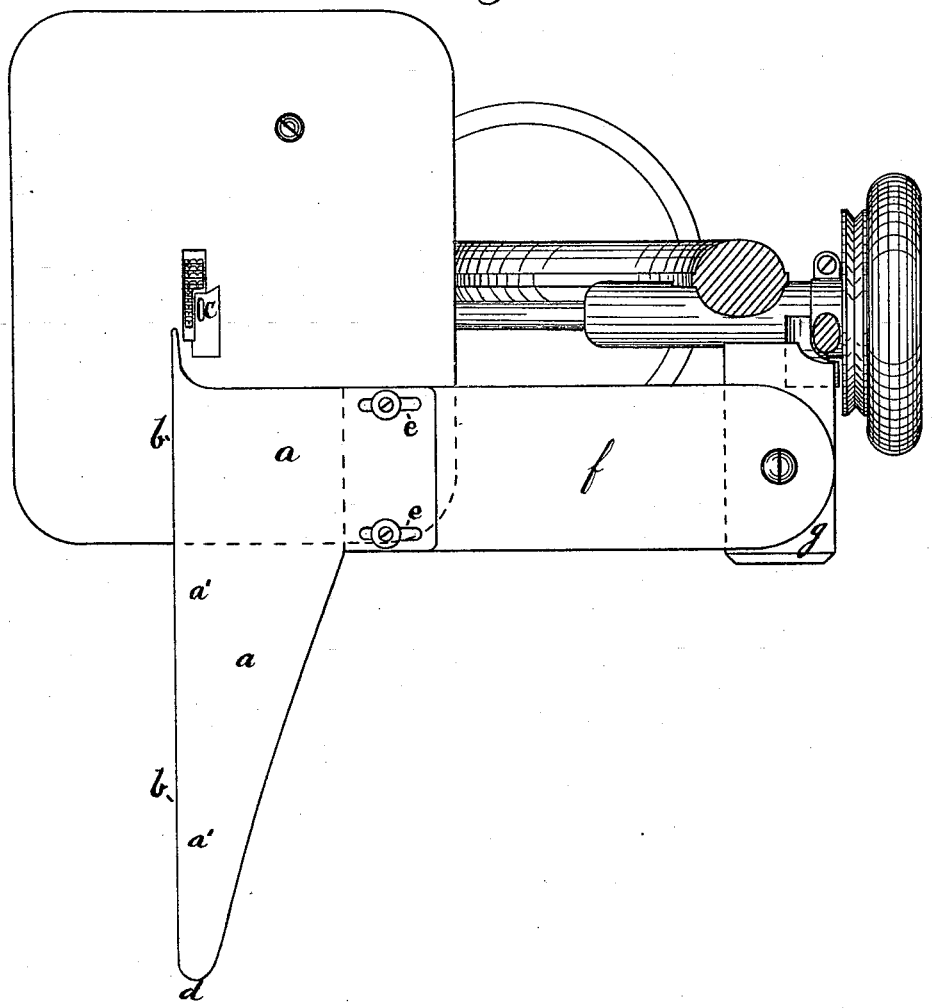
2 Sheets—Sheet 1.

F. A. KURSHEEDT.

PLAITERS FOR SEWING-MACHINES.

No. 185,182. Patented Dec. 12, 1876.

Fig. 1.



Witnesses.

Jas. S. Wightman.

W. L. Bennett

Inventor.

Fred A. Kursheedt

per

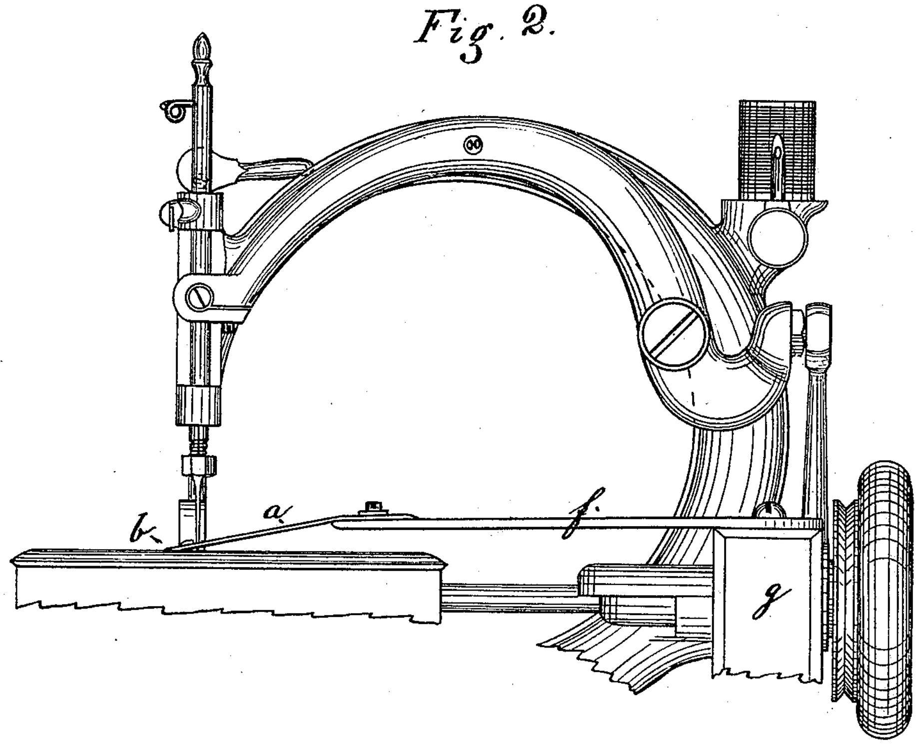
Munn & Co Patent Attys.

F. A. KURSHEEDT.

PLAITERS FOR SEWING-MACHINES.

No. 185,182. Patented Dec. 12, 1876.

Fig. 2.



Witnesses.

Jas. S. Wightman
W. L. Bennem.

Inventor.

Fred A. Kursheedt
per
Munn & Co. Atty

UNITED STATES PATENT OFFICE.

FRED A. KURSHEEDT, OF NEW YORK, N. Y.

IMPROVEMENT IN PLAITERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **185,182**, dated December 12, 1876; application filed June 3, 1876.

To all whom it may concern:

Be it known that I, FRED A. KURSHEEDT, of the city, county, and State of New York, have invented a new and useful contrivance by means of which tucks, plaits, may be folded and sewed with great speed and regularity; and that the following, taken in connection with the drawings, is a full, clear, and exact description thereof.

In the drawings, Figure 1 is a plan or top view of the whole contrivance, with the bracket, needle-arm, and presser-foot removed, and Fig. 2 is a side elevation thereof.

The drawings represent in parts thereof a Wilcox & Gibbs sewing-machine, with an ordinary four-motion feed; but I wish it distinctly understood that although a sewing-machine of some kind, with some sort of feed-motion forms a part of my combination, yet the special kind of sewing-machine, and the special kind of feed thereof, is unimportant, as any known kind of sewing-machine and feed apparatus may be used in combination with my tuck-regulator. In practice I prefer to use a Wheeler & Wilson machine, and with such machines am folding and stitching about eight feet of tuck per minute. As sewing-machines are well known, and as the precise variety of machine is unimportant, any description of the machine shown in the drawings is unnecessary.

The tuck-regulator is shown at *a a*, and I will proceed, first, to describe it in its best or preferred form, stating the modifications afterward. It consists of a blade of sheet metal, beveled so as to form a rounded or non-cutting edge at *b b*, shaped in plan as shown in the drawing, and extending from the needle-hole at *c* over the edge of the platform or table of the machine to *d*. It is provided with two slots, *e e*, through which screws pass, and is by means of these screws attached adjustably to a piece of metal or arm, *f*, which is by means of a screw, or in any proper way, confined to an upright, *g*, which extends upward from the bench or table upon which the machine is mounted. This arm or piece of metal *f* may be attached in some cases to the iron platform of the machine, if it be a long one, or to any stationary support, and the tuck-regulator may be confined adjustably to it in any proper known way. I prefer to attach the arm to its support in such manner that it may be swung out from the table of the machine, so as to start the tuck more easily, and so that when swung back it may bear against a stop, so that the edge of the regulator shall be parallel with the line of seam.

On examination of the elevation, Fig. 2, it will be seen that the edge of the regulator rests upon the table or platform, and that the regulator rises up from the table as it extends rearward. Also that it is so attached with reference to the table that when in use, the narrow end of the regulator shall lie about opposite the needle, measuring across the direction of the feed, and that the edge of the regulator shall be parallel with the line of feed, or nearly so, and at a distance in front of the line of feed equal to the distance between the line of stitches and the edge of the tuck.

In using the contrivance I prefer to rule, with ink which will wash out, a piece of cloth, the lines running along the length of the fabric, and being parallel to the selvage, and each line being in the position where it is desired to locate the edge of the tuck. This operation may be performed in a machine like that used for ruling paper. Before commencing to tuck the material thus ruled, the regulator is adjusted so as to make the seam at the desired distance from the marked lines, and the machine is threaded and made ready for operation. The operator then places part of the material under the regulator and part over it, with one of the ruled lines upon the edge of the regulator, and starts the machine. The feed now carries the stuff along, and as it progresses the operator, with the thumb and fingers applied above and below that part of the regulator which extends beyond the table, as at *a' a'*, twists or fells the stuff over the edge, so that the ruled line follows the edge of the regulator. As the stuff is thus fed along, the stitching mechanism puts a row of stitches in it at a distance from the rule line, which depends upon the adjustment of the regulator.

In practice I prefer to make the regulator

or its supporting-arm springy, so that its edge will bear with a slight pressure upon the table.

When one row of tucking is finished another may be formed in the same way. I tuck a whole piece of goods with parallel rows of tucks, and then cut it transversely into strips, which are sold for trimmings, the ruled lines being previously washed out and the stuff ironed, and, if desired, starched.

The plan, form, contour, or shape of the regulator is unimportant so long as it has an edge, and the end nearest the needle may, if narrower than the tuck, be set beyond the needle, or it may be wide and not set up as far as the needle, but the regulator must, unless constructed as hereinafter described, be long enough to extend over and beyond that side of the platform of the machine over which the goods pass in going to the needle, so that the operator can feel the ruled line or other mark to the edge of the regulator.

The regulator and its supporting-arm may be in one piece, and the adjustment dispensed with, and when in once piece, that part thereof which then takes the place of the arm, may be secured to its support adjustably. When the sewing-machine table is very wide the regulator need not extend over the table, but may be bent upward as it recedes from the needle in the line of seam, so that it shall rest upon the table near the needle only, and shall have room between it and the table at other parts to admit the fingers underneath it; but I prefer the precise construction shown in the drawings. Further, the whole regulator may bear upon the part of the goods between it and the table instead of bearing upon such goods at the edge only; but this construction is an inferior one.

I claim as of my own invention—

1. The combination, with a feed, such as is usual in a sewing-machine, of a tuck-regulator, having its edge extending over and beyond the side of the platform, or bent upward, substantially as described, whereby the material may be felt by the fingers to the edge of the regulator, the two being combined, and capable of operating, substantially as described.

2. A tuck-regulator, having its edge extending over and beyond the side of the platform, or bent upward, substantially as described, whereby the material may be felt by the fingers to its edge, in combination with the feed and stitching mechanism, making part of a sewing-machine, whereby tucks may be stitched upon fabrics substantially in the manner specified, the combination being substantially such as herein set forth.

FRED A. KURSHEEDT.

In presence of—

THOS. MILLER,

ROBT. A. CLIREHUGH.