A. M. SMITH.

Sewing Machine Guide.

No. 50,396. Patented Oct. 10, 1865.

Fig: 1.

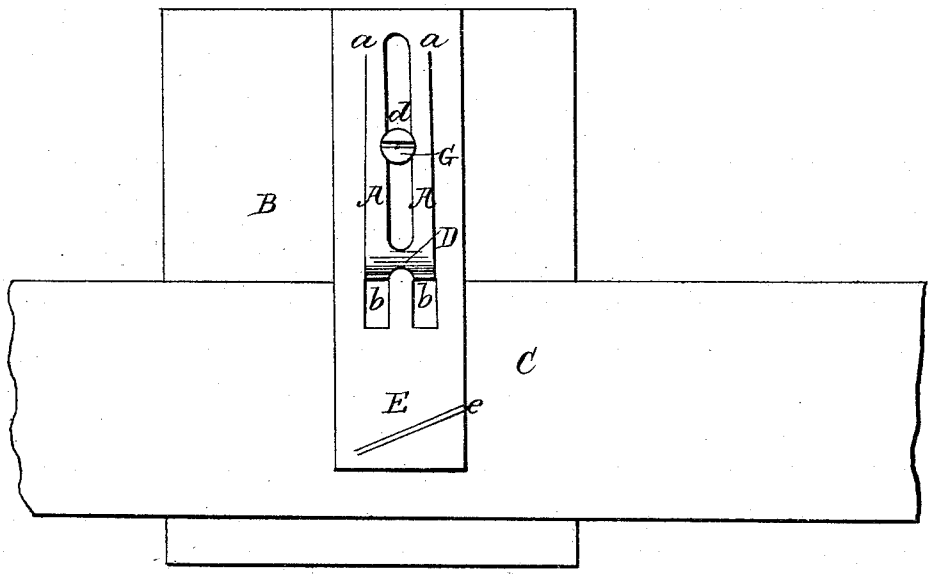
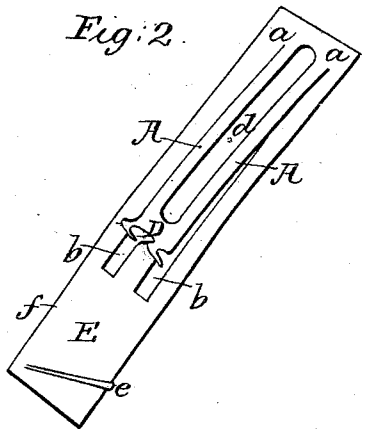


Fig: 2.



Witnesses.

Geo. L. Fox

Frederick A. Fox

Inventor.

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UNITED STATES PATENT OFFICE.

ALBERT M. SMITH, OF BROOKLYN, N. Y.

IMPROVEMENT IN GUIDES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **50,396,** dated October 10, 1865; antedated September 27, 1865.

To all whom it may concern:

Be it known that I, ALBERT M. SMITH, of Brooklyn, county of Kings, State of New York, have invented a new and useful Improvement in Guides for Sewing-Machines; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, of which—

Figure 1 is a top front view; Fig. 2, a perspective descriptive view.

My invention is an improvement upon the gages or guides patented to D. Barnum, February, 12, 1861, and L. T. Conant, December, 20, 1864, in which the gage is composed of upper and lower clamping-surfaces provided with corrugations between which the cloth is guided, and consists in constructing the guide of a single flexible metal or rubber springing plate or its equivalent, provided with a tongue having lips for guiding the edge of the cloth, and with a slot whereby to fasten it to the bed-plate, and also provided with one or more corrugations or ridges which bear upon the cloth, for inclining and keeping it against the lips. The cloth is passed directly between this one single plate and the smooth surface of the bed-plate, thus doing away with the lower plate of said guides, and cheapening and simplifying their construction.

I take a piece of thin elastic flexible sheet metal or rubber or its equivalent, but generally metal. I make incisions, as seen in Figs. 1 and 2. A portion of the plate is entirely removed, leaving a slot, *d*, but the piece A is left attached to the plate E at the back part, or it may be cut out entirely, and a piece corresponding therewith may be attached in any equivalent manner, so that the two pieces A and E shall be connected together at their back end, so that when the piece A is attached to the plate B by the screw *c*, as shown in Fig. 1, the piece E will be capable of rising or falling, owing to its flexibility, and of adapting itself to the different thicknesses of cloth passing under it.

I make on the front end of D of the piece A one, two, or more lips or projections, by bending the prongs on the end of A up and then down again, or by only bending them up; or, instead of making them in one piece, I can make them separate and attach them to the piece A in any equivalent manner; or, I construct the end in any other manner as shall be equivalent, so that the under side of it sets close to the sewing-plate and the upper side of it projects up through the spring part E, so as to form a gage or stop for the cloth to come against. I prefer two prongs, as at *b b*, Fig. 2, bent up double, or bent up and then down again, so that the ends of the prongs rest on the sewing-plate, as at *b b*, Fig. 1. In this center piece I make a number of holes or a slot, so that the guide can be fastened to the sewing-plate by a screw, as at G, Fig. 1, and allow of its being adjusted as desired.

In the front end, E, of the guide, or that part of it under which the cloth passes, I make one or more male corrugations or slight ridges across its face diagonally, and the surface of the sewing-plate which bears upon the lower side of the cloth perfectly smooth, so that male corrugations or ridges only are used, and they are on the plate E, to guide it inward against the gage D and keep the cloth from crimping. I make generally only one corrugation in the plate E and leave the remaining portion of it level and smooth. This plate, when fastened to the bed-plate, presses down upon it with force sufficient so that the cloth placed between them is guided as desired, the plate forming the clamping-surface and the bed-plate the supporting-surface of the cloth.

What I claim as new, and desire to secure by Letters Patent, is—

A single springing plate, with one or more corrugations or ridges, and a piece, A, with lips *b* secured to it back of the line of sewing, said plate, when attached to a sewing-machine, forming the clamping and guiding surface of the cloth, substantially as herein described.

ALBERT M. SMITH.

Witnesses:

GEO. L. FOX,

FREDERICK A. FOX.