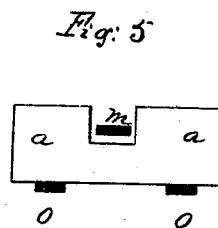
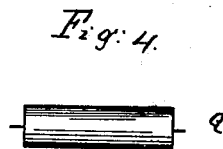
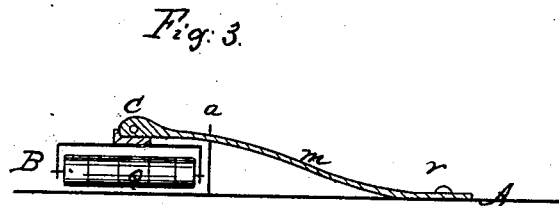
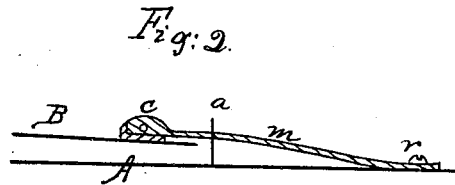
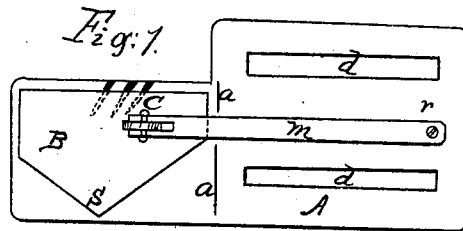


A. HUSTON.
SEWING MACHINE GAGE.

No. 49,031.

Patented July 25, 1865.



Witness.

C. H. H. H.
A. G. Huston.

Inventor

Arthur Huston

UNITED STATES PATENT OFFICE.

ARTHUR HUSTON, OF BRISTOL, ASSIGNOR TO SHAW & CLARK, OF BIDDEFORD, MAINE.

IMPROVEMENT IN CLOTH-GUIDES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 49,031, dated July 25, 1865.

To all whom it may concern:

Be it known that I, ARTHUR HUSTON, of Bristol, in the county of Lincoln, in the State of Maine, have invented a new and useful Improvement in Sewing-Machine Gages; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, of which—

Figure 1 is a top view of my improved gage. Fig. 2 is a side or edge view of the same. Fig. 3 is a modification of my improved gage. Fig. 4 is a view of a roller used in the modification or kind of gage shown in Fig. 3. Fig. 5 is a view of the guide or upright.

Corresponding letters of reference refer to corresponding parts.

On nearly all sewing-machines now used a gage is employed to keep the cloth in position and guide it to the needle. Many of these gages are constructed by attaching two thin metallic plates at one end in such a manner that the upper plate acts as a spring to press upon the cloth, while the lower one is fastened by a screw to the bed-piece of the machine, the cloth passing, on its way to the needle, between the upper and lower plates. It is to this class of gages that my improvement relates, the objections to those in common use being that the cloth wedges or crowds between the upper and lower plates at the part nearest the ends which are attached together, and such gages will not permit seams and uneven places in the cloth to pass freely to the needle, and will not keep the cloth properly distended and smooth—difficulties which are overcome by my invention.

In Fig. 1, A is the body or main part of the gage, which is constructed of thin sheet metal, having two slots, *dd*, through which the thumb-screw passes by which it is attached to the sewing-machine, after the usual manner of attaching a gage.

B is a pad or upper plate, shaped as shown, and which is pressed upon the cloth being sewed by a spring, *m*, which is attached at one end to the plate A by the screw or rivet *r*, and at the other end is jointed to the plate or pad B by the joint *c*.

An upright guide or plate, *a a*, is attached to the plate A and rises at right angles to it to prevent the cloth from passing under the spring *m*, and to guide it in a right direction to the needle. This upright plate is shown more fully in Fig. 5, in which *a a* is the plate, and *o o* flanges or projections by which it is attached to the plate A. In the top part of it is an aperture or slot in which the spring works, and which prevents the spring *m* and pad B from being drawn or pulled out of place by the action of the cloth being sewed. The pad B is beveled or shoe-shaped on its under side around the edges to enable it to ride easily over uneven places in the cloth, and when constructed with the point *s*, or in the peculiar form shown in Fig. 1, operates to distend and smooth the cloth and direct it against the guide *a a* as it passes to the needle, and by being hinged to the spring in the manner shown, by the joint *c*, is enabled to yield at either end to accommodate itself to any unevenness in the cloth.

I do not confine myself to the peculiar shape of pad shown in Fig. 1, as I have used a variety of forms. I have also used a pad with a roller, as in Fig. 3, the roller having grooves, as shown in that figure and sometimes as shown in Fig. 4. I have also grooved the inner surface of the plate A, as at *x*, with diagonal grooves to guide the cloth against the part *a a*. The inner face of the pad B can be grooved in the same manner; but I prefer plain surfaces, and a pad of the form shown in Fig. 1.

I do not claim a spring-gage, as such are old and well known; but

What is of my invention is—

1. A sewing-machine gage in which the pad or upper plate, B, is arranged and used substantially in the manner and for the purposes shown and specified.

2. Constructing the pad B substantially in the form described and shown in Fig. 1, for the purposes specified, when such pad is arranged and used in the manner herein set forth.

ARTHUR HUSTON.

Witnesses:

E. N. STETSON,
A. G. HUSTON.