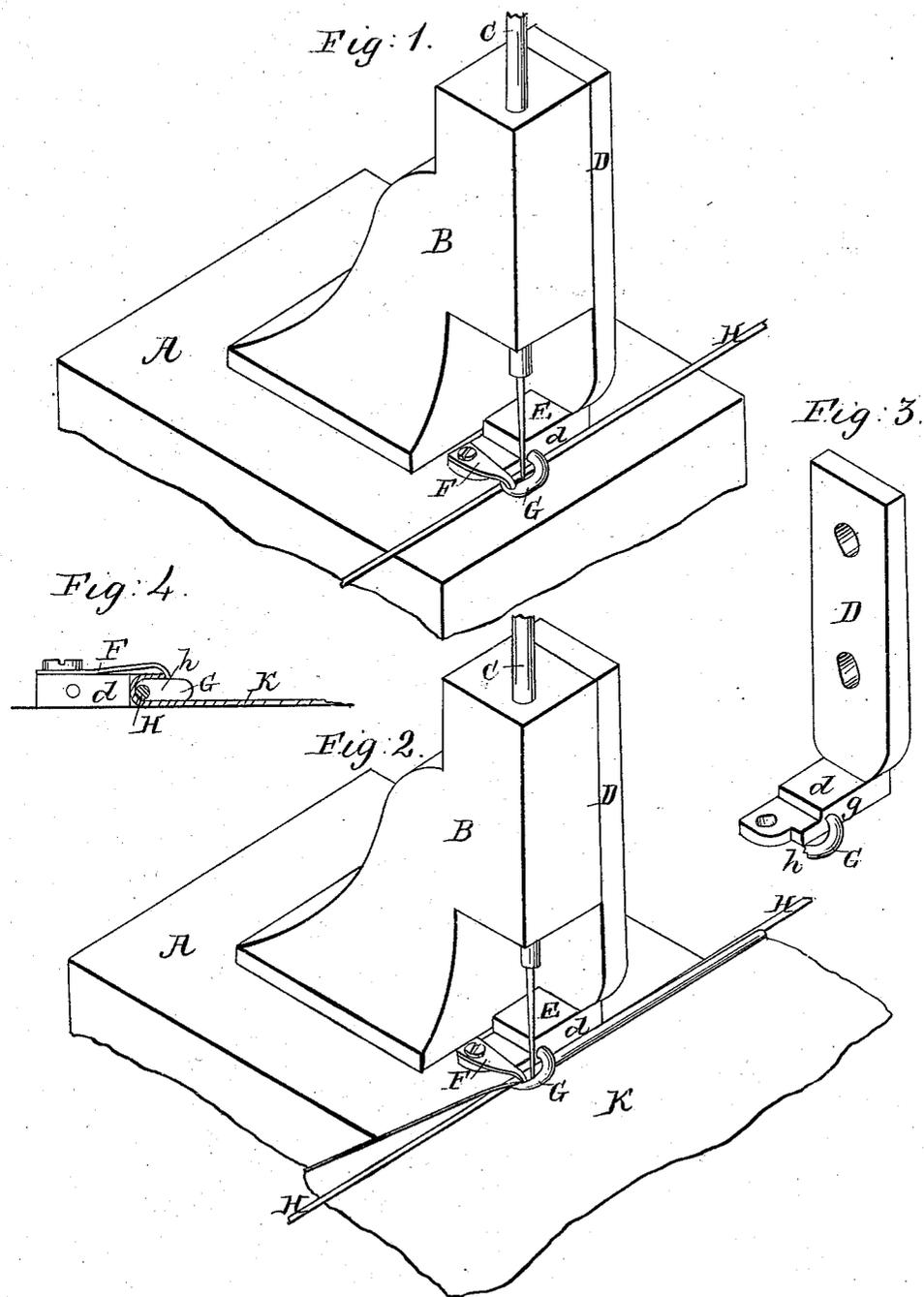


H. B. ODIORNE.
Sewing Machine Guide.

No. 12,826.

Patented May 8, 1855.



Witnesses.
Henry Howson
Joseph Bondy

Inventor
H B Odiorne

UNITED STATES PATENT OFFICE.

HENRY B. ODIORNE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN GUIDES FOR HEMMING AND CORDING.

Specification forming part of Letters Patent No. 12,826, dated May 8, 1855.

To all whom it may concern:

Be it known that I, HENRY B. ODIORNE, of the city of Philadelphia and State of Pennsylvania, have invented a new and Improved Apparatus for Cording the Edges of Textile Fabrics; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists in attaching to any ordinary sewing-machine an apparatus which serves effectually to keep the cord in its place within the hem of the fabric while the latter is being operated upon by the needle and thread, being so arranged that any knot in the cord or any inequality in the edge of the fabric will not impede the progress of the work.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the drawings, Figure 1 is a perspective view of a portion of a sewing-machine with my improved apparatus attached. Fig. 2 is the same, showing the fabric to be operated upon as introduced into its proper position. Fig. 3 is a detached view of a portion of my improved apparatus with spring-guide removed. Fig. 4 is an enlarged sectional view, showing the manner in which the cord is retained within the hem, and the action of the spring-guide in regulating the width of that hem. Figs. 1, 2, and 3 are double, and Fig. 4 four times, the full size.

The same letters of reference allude to similar parts throughout the several views.

On reference to the drawings, A represents a portion of the frame-work or bed of a sewing-machine; B, a standard on the same, which serves as a guide for the operating spindle C. The latter has a needle, E, of the description generally used in sewing-machines, secured to the lower end, and is actuated from above by any convenient means.

Secured to the side of the standard B is the bracket D, which has a projection, *d*, at the bottom, forming what is technically termed the "shoe." This rests upon the bed A of the machine. If found more convenient, the shoe *d* may be secured direct to the bed A, instead of forming part of the bracket D.

To the front edge of the shoe *d* is secured

one end, *g*, of the retainer G, which is bent partially round, the other end, *h*, terminating a short distance from the edge of the shoe. The end *h* of the retainer G has a notch sufficiently large to admit about one-half of the cord H, as illustrated in the enlarged view, Fig. 4, the point of the needle operating inside the retainer G, between the point *h* and the part *g*, where it is secured to the shoe. Onto the top of the extreme end of this shoe is secured the spring-guide F, which is made of steel or other suitable elastic substance. The hole in the guide F, through which the screw *k* passes into the shoe, is longitudinal, so that the distance of the point of the guide from the front edge of the shoe may be varied at pleasure. The point of the guide F is bent downward, as shown in Fig. 4, and is allowed to come in contact with top of the portion *h* of the retainer G, over which it projects to a distance proportionate to the size of the hem required on the fabric.

The cord H and the edge of the fabric K are placed in connection with the apparatus, as shown in Figs. 2 and 4. The cord, passing in front of shoe *d* and in a line parallel with it, takes its place in the notch at the point *h* of the retainer G; and passes onward under the other end, *g*, of the said retainer. The edge of the fabric K passes under the retainer and over the cord in such a manner that the hem, previous to being operated upon by the needle, passes over the point *h* of the retainer G, and consequently effectually incloses the cord placed in the notch of that point, the width of the hem being regulated by the point of the spring-guide F. After being operated upon by the needle and thread, the hem, with the cord stitched within its fold, passes under the part *g* of the retainer G, and is further directed onward by any convenient feeding apparatus.

It will be observed that the notched end *h* is a sufficient distance from the shoe to allow the cord and the portion of the fabric turned over and forming the hem to pass easily, but still sufficiently near to keep the said cord effectually and constantly within that hem. The advantage of this arrangement is that any knot in the cord will pass the notch without impeding the progress of the work—a difficulty which frequently occurs when the cord is directed through a diagonal hole bored out of the solid metal, as in Blodget's patent appara-

tus. Another advantage obtained by my improved apparatus is the fact of the needle taking effect close to the point where the cord is effectually retained in the hem, thereby insuring a greater uniformity in the work.

It will be seen that the retainer G serves the double purpose of keeping the cord securely in its place within the hem before it is stitched, and of keeping the said hem down afterward.

The spring-guide F, as before remarked, acts as a gage for the width of the hem, and consequently renders the process of directing the fabric to the machine more easy and certain for the operator, while the elasticity of

the guide F allows any obstruction in the fabric to pass.

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

The curved retainer G, with its notched end *h*, in combination with the shoe *d*, for effectually keeping the cord in contact with the inside of the hem of the fabric while the said hem is being operated upon by the needle and thread of a sewing-machine.

H. B. ODIORNE.

Witnesses:

HENRY HOWSON,
JOSEPH BOND, Jr.