

(No Model.)

G. W. BAKER.

HEM STITCH ATTACHMENT FOR SEWING MACHINES.

No. 261,421.

Patented July 18, 1882.

Fig. 1.

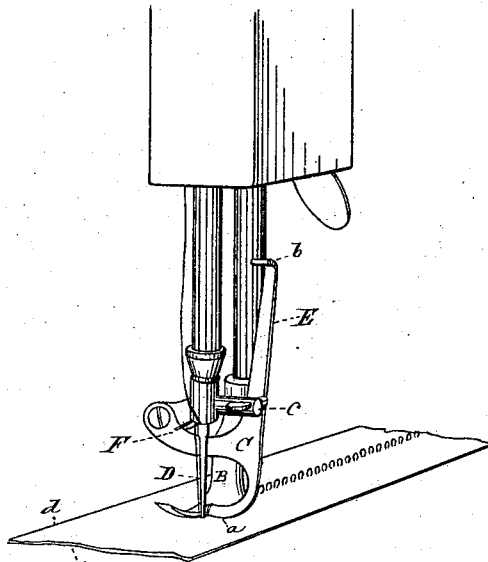


Fig. 3

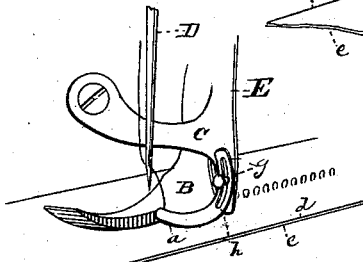


Fig. 2

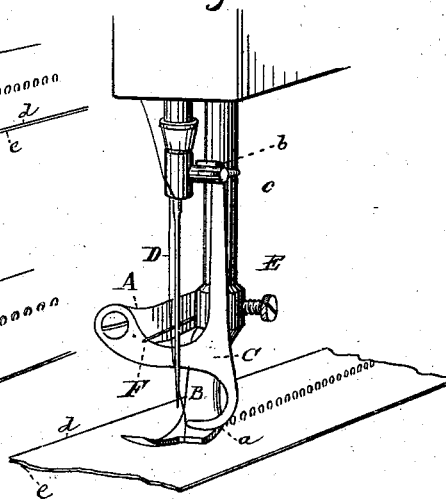


Fig. 5

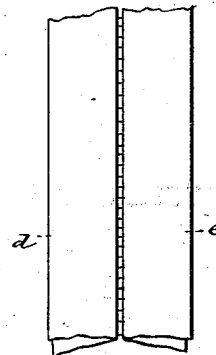
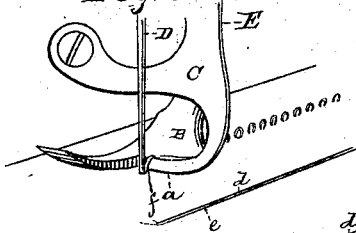


Fig. 4



WITNESSES

*W. Engel*  
*Jno. Cronin*

INVENTOR

*Geo. W. Baker*  
*By Lygett & Lygett*  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

GEORGE W. BAKER, OF CLEVELAND, OHIO.

## HEMSTITCH ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 261,421, dated July 18, 1882.

Application filed May 5, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. BAKER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Hemstitching Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to sewing-machine attachments, and more particularly to an attachment for producing what is known as the "hem-stitch," (shown in Figure 5 of the drawings;) and it consists in the peculiar construction of the same, as will be hereinafter set forth and claimed.

In the drawings, Fig. 1 is a view in elevation of my device, showing it attached to a sewing-machine, and the position it occupies when the needle is down. Fig. 2 is also a view in elevation of my device attached to a sewing-machine, showing its position when the needle is raised. Fig. 3 shows my device in position just before the needle-bar enters the goods, and Fig. 4 shows it after the needle has entered the goods. Fig. 5 is a plan view of two pieces of goods connected by means of the hemstitch.

A is a bracket or arm which is secured to and extends out from the presser-foot B. Pivottally secured to this bracket or arm A is a hook-shaped piece, C, the lower end or looper, *a*, of which is adapted to occupy a position just ahead of the needle D, and preferably between the needle D and presser-foot B, as shown in Figs. 1 and 4, the presser-foot being cut away, as shown more plainly in Fig. 2, to allow the end *a* to enter.

Extending upward from the free end of the piece C is an arm, E, which is provided at its upper end with a hook or lug, *b*, with which the set-screw *c* engages, as shown in Fig. 2, and acts, as the needle is being raised, to pull the looper *a* outward and upward, as shown.

F is a spring, which rests on the upper side of the piece C, and acts, when the needle is lowered, to cause the looper *a* to again resume the position shown in Figs. 1, 3, and 4.

The operation of my device is as follows: Two pieces of goods, *d* and *e*, between which it is desired to form the hemstitch, are placed

under the needle with their right sides facing each other. The presser-foot B is then lowered and the machine set in motion. Now, as the needle is descending and before it has entered the cloth, the spring F causes the looper *a* of the piece C to occupy the position shown in Fig. 3, in the rear of the thread, so that after the needle has entered the cloth, as shown in Figs. 1 and 4, a loop, *f*, is formed. The upward motion of the needle-bar causes the set-screw *c* to engage with the upper portion of the arm E, which acts to release the loop *f* from the looper *a*. The foregoing operation is repeated at every up and down motion of the needle, thus forming loops or loose stitches, which, when the pieces of goods *d* and *e* are folded on themselves, as shown in Fig. 5, are drawn out and form the hemstitch.

I have described one manner of operating my device and causing the looper *a*, in conjunction with the needle, to form a loop; but any mechanism which will cause the end *a* to reciprocate, and thus form the loop, may be used.

In order to adapt the end or looper *a* to form a longer or shorter loop, I provide a means of raising and lowering the said end. One manner is shown in Fig. 3, which consists in forming the looper separate from the piece C and adjustably securing it to said piece by means of a set-screw, *g*, and a slot, *h*.

What I claim is—

1. The combination, with the needle and needle-bar of a sewing-machine, of an arm, A, a piece, C, pivoted thereto, and provided with a hook, *a*, and means, substantially as described, for reciprocating said hook.

2. The combination, with the needle and needle-bar of a sewing-machine, of the arm A, set-screw *c*, spring F, and pivoted piece C, having the looper *a* and lug *b*, substantially as set forth.

3. The combination, with the piece C, of the adjustable end piece or looper, *a*, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE W. BAKER.

Witnesses:

F. M. SANDERSON,  
R. F. CURTISS.