

(No Model.)

C. F. HARLOW & E. E. ANGELL.

TRIMMING ATTACHMENT FOR SEWING MACHINES.

No. 319,245.

Patented June 2, 1885.

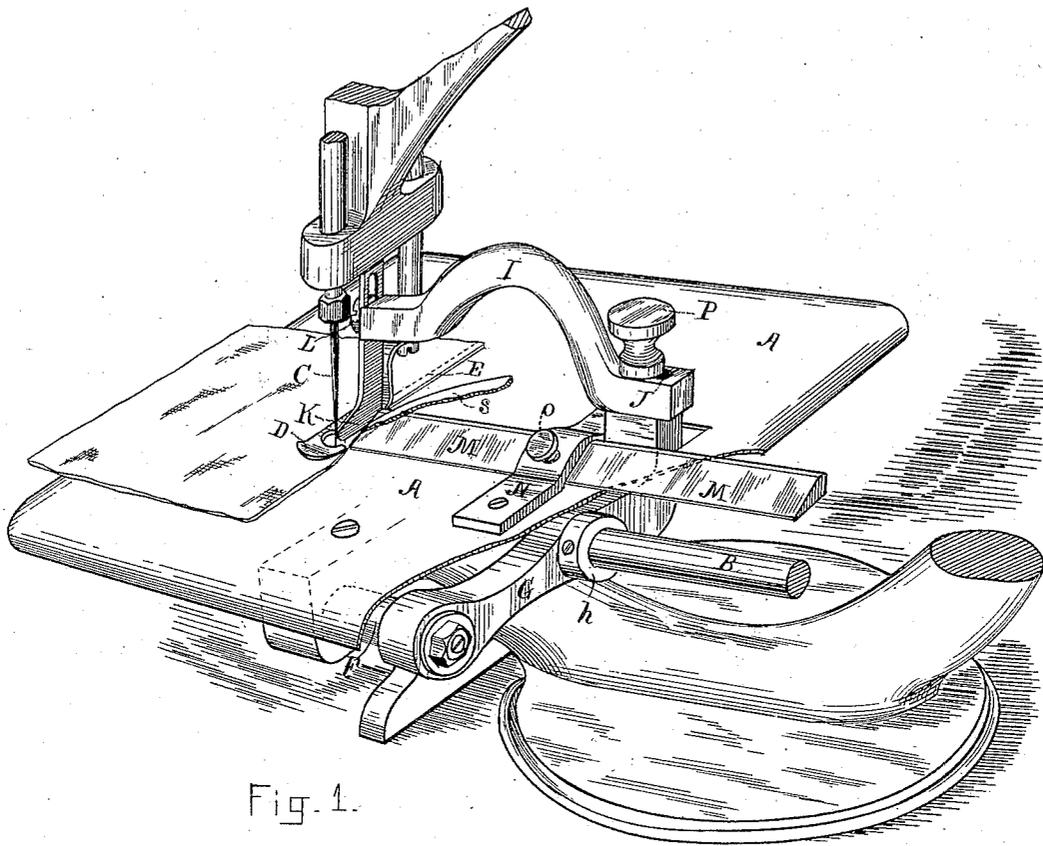


Fig. 1.

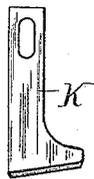


Fig. 4.

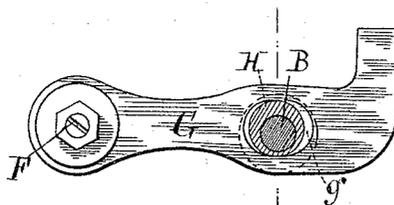


Fig. 2.

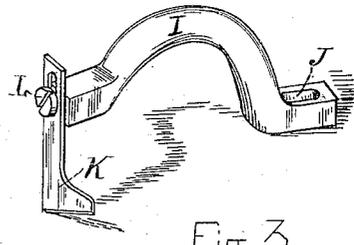


Fig. 3.

WITNESSES:
Chas. S. Croston,
E. A. Phelps.

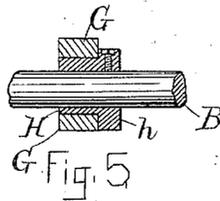


Fig. 5.

INVENTORS:
Charles F. Harlow,
Edwin C. Angell,
by A. H. Power,
their atty

UNITED STATES PATENT OFFICE.

CHARLES F. HARLOW AND EDWIN E. ANGELL, OF MALDEN, MASS.

TRIMMING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 319,245, dated June 2, 1885.

Application filed August 6, 1884. (No model.)

To all whom it may concern:

Be it known that we, CHARLES F. HARLOW and EDWIN E. ANGELL, citizens of the United States, residing at Malden, in the county of Middlesex and State of Massachusetts, have jointly invented certain new and useful Improvements in Trimmers for Sewing-Machines; and we do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

The object of this invention is to provide a simple and most efficient mechanism for trimming the edges of fabrics automatically at any desired distance from the seam which unites them, and simultaneously with the formation of such seam.

Complicated contrivances for this purpose have been heretofore devised; hence we do not claim, broadly, any suitable apparatus therefor, but simply the combination of devices hereinafter described, and set forth in the appended claim.

The drawings illustrate clearly the simple character of our improvement as applied to a machine of the Wilcox & Gibbs type; but it is obvious that it may be applied readily to various styles of sewing-machines.

Figure 1 is a perspective view with parts of the frame, shaft, and bed-plate broken away to bring out more clearly the essential features of our invention. Fig. 2 is an elevation of the pivoted lever which carries the arm and movable cutter, the shaft being in section. Fig. 3 shows the arm and cutter detached from the lever, and Fig. 4 the movable cutter alone. Fig. 5 shows in section the eccentric, shaft, and lever, by which the cutter is actuated.

A is the bed-plate of the machine; B, the driving-shaft, and C the needle, actuated in the usual manner, the presser-foot D holding the goods in position as they are fed forward in the formation of the seam E.

Beneath the bed-plate, at its front edge, is a fixed stud or pin, F, forming an end pivot for a lever, G, which has a slot or recess, *g*, midway of its length to receive an eccentric, H, on the shaft B, by which the lever is vibrated up and down. By preference the eccentric is formed in one with a collar, *h*, se-

cured to the shaft by a set-screw. At its free end this lever is turned upwardly, and rises through the bed-plate, as shown in Fig. 1. An arm, I, secured to the top of this upturned part, extends in a plane nearly at right angles to the lever, nearly to the needle C, the distance therefrom being regulated by a slot, J, in the end of the arm, and a set-screw, P, therein, which fixes its position when adjusted as desired.

The arm I bears at its outer end the movable cutter K, which may be slotted, as shown, and held at the desired height by a set-screw, L, the cutting-edge being at the bottom and extending obliquely upward from the heel.

A stationary blade, M, lies flat upon the bed A, held in position and made adjustable toward and from the needle by the strap N and set-screw O, or by equivalent means. This blade is simply a bar of steel, beveled at its front with its cutting-edge at the end, so as to form with the cutter K a mouth or pair of jaws, between which the goods being stitched gradually enter, and are trimmed the length of one stitch at each reciprocation of the needle, as will be clear from Fig. 1.

From this construction a shearing or drawing cut is obtained, rendering any clamping device for the cut strip unnecessary, since the cutter K moves in a short arc described from the pivot F, as does the lever G, and the fabric is trimmed on the slightly backward stroke at the desired distance from the seam, the strip S severed from the goods running up loosely over the end of the stationary blade M.

We claim as our invention—

In a sewing-machine, an automatic edgetrimming mechanism consisting of the lever G, pivoted at one end and actuated by a cam on the shaft B, with the adjustable arm I, carrying the movable cutter K, in combination with a stationary blade, M, adjustable toward and from the needle, substantially as and for the purpose set forth.

In testimony whereof we hereto affix our signatures in presence of two witnesses.

CHARLES F. HARLOW.
EDWIN E. ANGELL.

Witnesses:

A. H. SPENCER,
C. G. KEYES.