C. H. BAYLEY.

Trimming Attachment for Sewing-Machines.

No. 212,122. Patented Feb. 11, 1879.

Fig. 2.

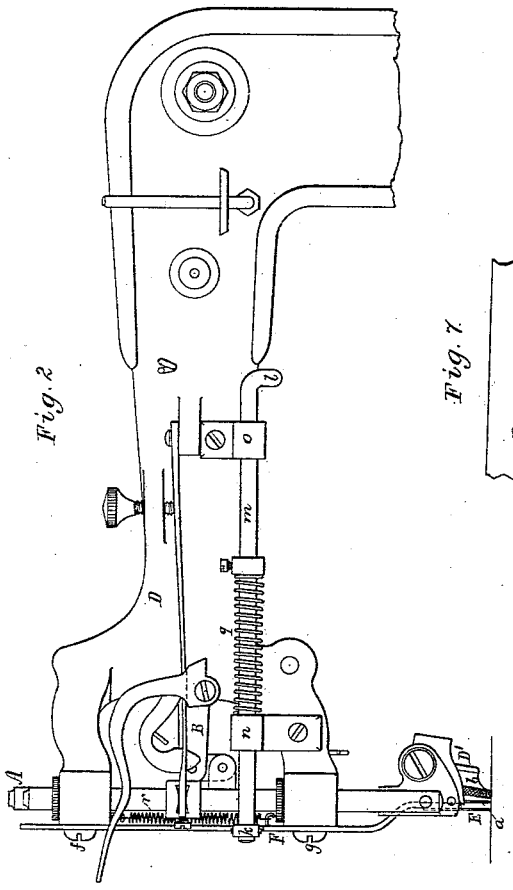

Fig. 7.

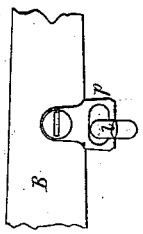

Fig. 3.

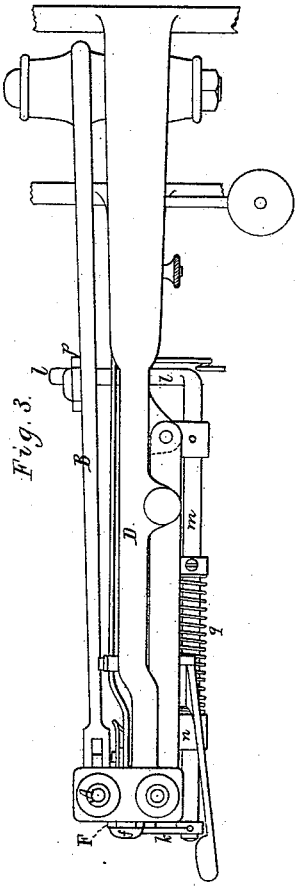

Fig. 6.

Fig. 1.

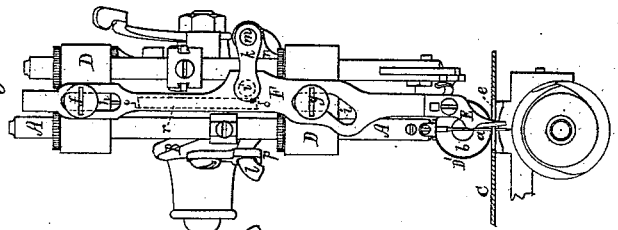

Fig. 4.

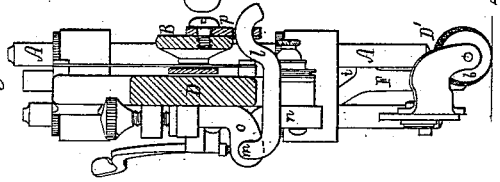

Fig. 5.

Witnesses

S. N. Pipes

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Inventor

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UNITED STATES PATENT OFFICE.

CHARLES H. BAYLEY, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN TRIMMING ATTACHMENTS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **212,122**, dated February 11, 1879; application filed December 18, 1877.

To all whom it may concern:

Be it known that I, CHARLES H. BAYLEY, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Trimming Attachments for Sewing-Machines; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is an end elevation, with needle-plate in section; Fig. 2, a side view; Fig. 3, a top view; and Fig. 4, a transverse section of the arm or "goose-neck" and certain parts of a sewing-machine provided with my invention, which relates to sewing machinery provided with mechanism for trimming the work while being sewed.

My invention consists, first, in the combination of a reciprocating trimmer-carrier, having a pivotal hole and a lifting-spring, with a rock-shaft, its pivotal arm, and retracting-spring, all being arranged and applied substantially in manner and to operate as set forth; second, in a combination for operating the trimmer-carrier by means of the needle-operative lever; third, in the combination of a reciprocating trimmer-carrier having a pivotal hole and a lifting-spring with a rock-shaft, its pivotal and operating arms, and retracting-spring, all as represented; fourth, the trimmer-carrier, provided with the vertical and angular slots for guiding it vertically, and for moving the trimmer laterally out of the path of the needle-carrier while the trimmer is being drawn upward above the work-support plate.

In the drawings, A denotes the needle-carrier; *a*, the needle, and B the usual lever for producing the vertical motions of the said carrier. C is the work-support plate, which is shown in top view in Fig. 5. D is the goose-neck or arm to which the lever B is pivoted, and which supports the needle-carrier and the presser D′, such presser, as represented, having pivoted to it a wheel, *b*, instead of having what is termed a "presser-foot." The lower part of the periphery of this wheel bears upon the material or work to be sewed and trimmed, and keeps it down upon the work-support plate C.

E is the work-trimmer, which is a knife having its cutting-edge somewhat inclined to the support-plate, in order that while descending therein the work-trimmer shall cut with a drawing stroke, and in a direction opposite to that in which the cloth or material is moved by the feeder.

In the work-support plate there is a hole, *c*, for the passage of the needle through the plate. There are also in such plate two slots, *d e*, which, arranged with the needle-hole in manner as shown, serve to receive the feeder and the trimmer, the latter, while in operation, being extended within and remaining in the slot *e*, and out of such only when not in use for trimming.

With the wheel-presser to hold the work down, and with the trimmer, while in operation, maintained in the work-support plate, "cockling" and uneven trimming of the work are prevented.

The trimmer E is fastened to a reciprocating carrier, F, which is supported against the head of the goose-neck by screws *f g*, which go through slots *h i* in such carrier, (see Fig. 6, which is a front view of the said carrier,) the lower of such slots being angular, as shown, in order that when the trimmer may be in the act of being raised above the support-plate such trimmer may be moved or deflected laterally out of the path of the needle-carrier.

There is in the trimmer-carrier a pivotal hole, *h′*, to receive a pivot, *i′*, extending from an arm, *k*. The said arm *k* and a hooked or bent arm, *l*, project from a rock-shaft, *m*, arranged to turn and slide in brackets *n o*, extending from the goose-neck. The hooked arm *l* projects through a stirrup, *p*, pivoted to the lever B. (See Fig. 7, which is a side view of the stirrup and the arm.) There is upon the shaft *m* a helical spring, *q*, to retract it, in order to draw the pivotal arm into engagement with the trimmer-carrier. Furthermore, there is to the latter a spring, *r*, for drawing it upward, such spring *r* being fixed at its upper end to the goose-neck.

On moving the shaft *m* forward, the pivotal arm may be thrown out of engagement with the trimmer-carrier, which no sooner takes place than the latter will be drawn upward, so as to raise the trimmer out of the support-plate,

in order to enable the machine to perform sewing of the work without trimming it at the same time.

During the motions of the lever B reciprocating rotary movements will be imparted to the shaft *m*, whereby, when its pivotal arm is in engagement with the trimmer-carrier, the latter will be moved vertically up and down, the trimmer, during such movements, being kept within the support-plate.

The machine to which my invention is represented as applied is a Wheeler & Wilson sewing-machine, and has a rotary hook to carry a spool, and with such to operate with the needle; but as such constitutes no part of my said invention, further mention of it and description of its operative mechanism is not necessary.

I claim as of my invention as follows:

1. The combination of the reciprocating trimmer-carrier F, having a pivotal hole, *h'*, and a lifting-spring, *r*, as described, with the rock-shaft *m*, its retractive spring *q*, and pivotal arm *k*.

2. For operating the trimmer-carrier F by the needle-operative lever B, the combination of the stirrup *p*, rock-shaft *m*, and the arms *k* and *l*, all being arranged and applied substantially as set forth.

3. The combination of a reciprocating trimmer-carrier, F, having a pivotal hole, *h'*, and a lifting-spring, *r*, with a rock-shaft, *m*, provided with the pivotal and operating arms *k l* and retracting-spring *q*, arm *l* being extended into the stirrup *p*, arranged to be attached to the needle-operative lever B, all being arranged and applied and to operate substantially as set forth.

4. The trimmer-carrier provided with the vertical and angular guide-slots *h i*, arranged in it, substantially as and for the purposes as set forth.

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Witnesses:
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JOHN R. SNOW.