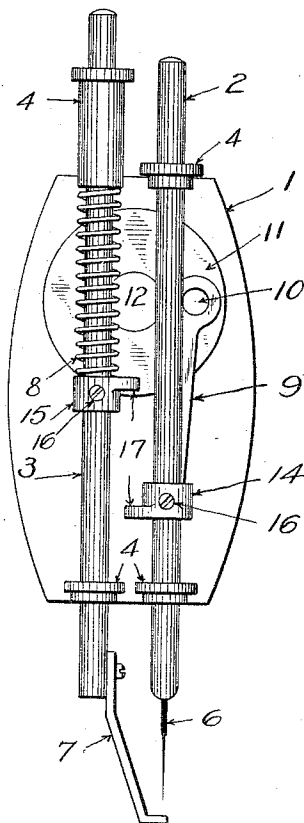


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 AUTOMATIC PRESSER FOOT LIFTER FOR SEWING MACHINES.
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1,044,695.

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WITNESSES
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UNITED STATES PATENT OFFICE.

DAVID SCHULER, OF KERRTOWN, PENNSYLVANIA.

AUTOMATIC PRESSER-FOOT LIFTER FOR SEWING-MACHINES.

1,044,695.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed September 9, 1910. Serial No. 581,154.

To all whom it may concern:

Be it known that I, DAVID SCHULER, a resident of Kerrtown, in the county of Crawford and State of Pennsylvania, have invented a new and useful Improvement in Automatic Presser-Foot Lifters for Sewing-Machines, of which the following is a specification.

This invention relates to attachments for sewing machines of all kinds, and is intended for use in tacking, basting, embroidering and other operations in which long or irregular stitches are necessary or desired.

The invention comprises the arrangement of parts hereinafter described and claimed.

The accompanying drawing shows in elevation, and somewhat diagrammatically, the head of a sewing machine, with my invention applied thereto.

In the drawings 1 represents the head of any form of sewing machine, having mounted thereon for vertical reciprocation the needle carrier 2 and the presser foot carrier 3, these being mounted to reciprocate in the bearings or guides 4. The needle carrier is provided with the usual means for holding the needle 6, while the presser foot 7 is attached to the presser foot carrier 3 by suitable means, such as a set screw. The presser foot carrier is yieldingly held in its lowermost position by a spring 8, one end of which engages the guide 4 and the other a collar or member 15 hereinafter referred to. The needle carrier 2 will be reciprocated by the usual or any preferred mechanism, being shown as connected by connecting rod 9 to a crank pin 10 carried by disk 11 on the end of the driving shaft 12, as is common in some sewing machines, and will be readily understood without specific description or detailed illustration.

My special attachments comprise two members, 14 and 15, carried respectively by the needle carrier 2 and the presser foot carrier 3, preferably being detachably and rotatably secured thereon by any suitable means, such as set screws 16 in order that they can be adjusted to contact or not, as desired, on the up stroke of the needle carrier. These members are so formed, such as being provided with projections 17, that when the needle carrier moves upwardly its member 14 engages the member 15 on the presser foot carrier, and lifts the lat-

ter against the tension of spring 8 sufficiently to entirely free the goods underneath the presser foot, so that the operator can move the goods in any direction or for any distance. As a consequence, stitches of any desired length or in any desired direction may be made, thereby readily adapting the machine for tacking or basting, in which long stitches are desirable, or for embroidering or similar work, where stitches of various lengths and in various directions are necessary. The members 14 and 15 may be placed in position upon their respective carriers by disengaging the latter from their bearings by endwise movement and slipping the members endwise upon their respective carriers. Reverse operations will also permit removal of the members from their carriers when desired.

The invention has been illustrated in the form of attachments which can be supplied at very small cost to any sewing machine to convert the same into a tacker, baster, or embroidering machine, or back again to a plain sewing machine, by merely adjusting the positions of the attachments, either longitudinally or circumferentially of their respective carriers, to bring either out of the range of movement of the other, as will be readily understood. If the machine is intended only for basting or similar work, the members 14 and 15 instead of being in the form of attachments adjustably secured to the needle carrier and presser foot carrier, may be integral with the needle and presser foot carriers, as will be readily understood.

The presser foot 7 may be the usual presser foot, or a special form of presser foot if desired.

What I claim is:

1. In a sewing machine, the combination with a needle carrier, a presser foot carrier mounted to reciprocate vertically, and mechanism for reciprocating the needle carrier, of a member detachably secured to the presser foot carrier, and a cooperating projection on the needle carrier arranged on the up stroke of the latter to engage said member and lift the presser foot to release the work, said projection being rotatably adjustable on said needle carrier into and out of cooperative relation with said member.

2. In a sewing machine, the combination with a needle carrier, a presser foot carrier

mounted to reciprocate vertically, and mechanism for reciprocating the needle carrier, of collars detachably secured to said presser foot carrier and needle carrier and
5 arranged on the up stroke of the needle carrier to engage and lift the presser foot carrier, one of said collars being provided with a projection and rotatably adjustable on its carrier to disengage it from its cooperating
10 collar.

3. In a sewing machine, the combination with a needle carrier, a presser foot carrier mounted to reciprocate vertically, and mechanism for reciprocating the needle carrier,
15 of a member vertically adjustable on the presser foot carrier, and a cooperating member on the needle carrier arranged on the up stroke of the needle carrier to engage the presser foot member and lift the
20 presser foot to release the goods, one of said members having a projection and being detachably secured to and rotatably adjustable on its carrier.

4. In a sewing machine, the combination
25 with a needle carrier, a presser foot carrier mounted to reciprocate vertically, and mechanism for reciprocating the needle car-

rier, of members on said carriers arranged to contact on the up stroke of the needle carrier and lift the presser foot carrier, one of
30 said members being adjustable lengthwise on its carrier to permit the reciprocation of the needle carrier without lifting the presser foot, and a spring engaging the member on the presser foot carrier for yieldingly forcing
35 it downwardly.

5. In a sewing machine the combination of a needle carrier and a presser foot carrier mounted to move vertically, mechanism for reciprocating the needle carrier,
40 and cooperating members on said carriers each movable with its carrier, the needle carrier member being arranged to engage the presser foot carrier member on the up-
45 stroke and lift the same, and being adjustable on its carrier into and out of cooperative relation with the presser foot carrier member.

In testimony whereof, I have hereunto set my hand.

DAVID SCHULER.

Witnesses:

M. N. BEEMAN,
J. H. PARDEE.