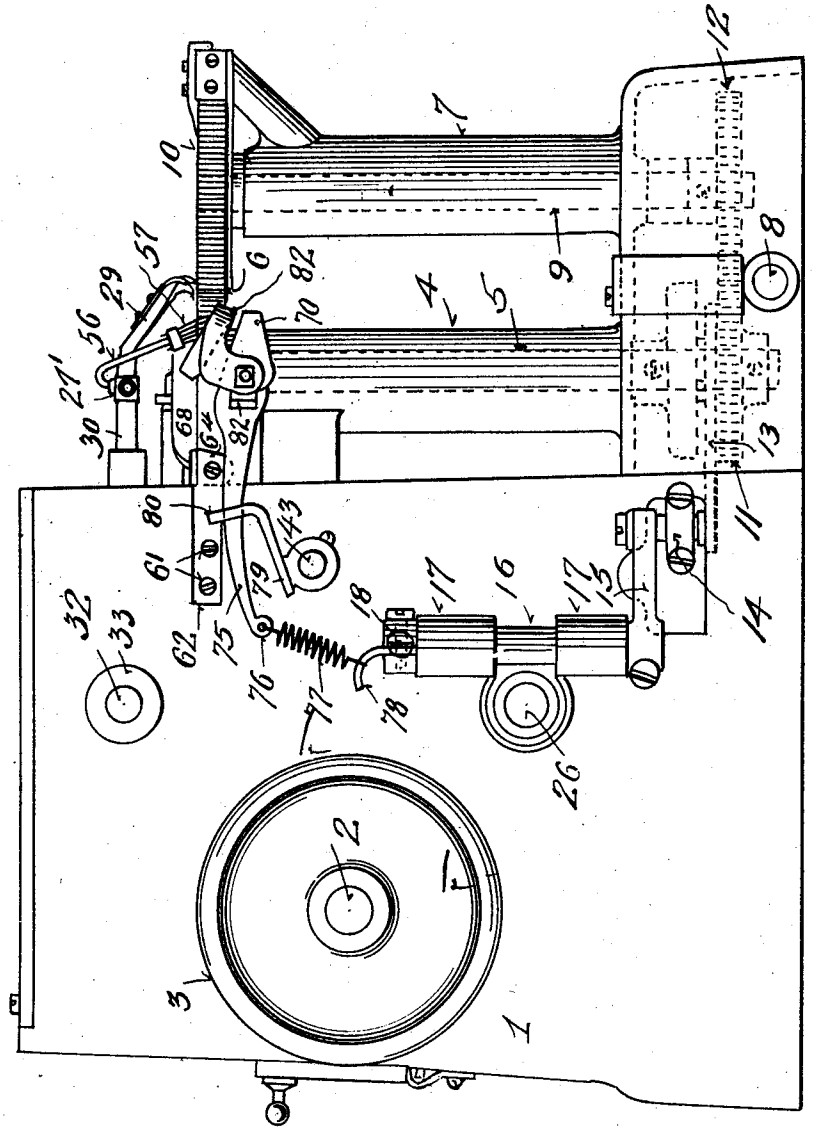
Aug. 11, 1931. P. D. REDCAY 1,818,753

END TRIMMING MECHANISM FOR CUP FEED OVERSEAMING MACHINES

Filed April 20, 1928 4 Sheets-Sheet 1

Fig. 1.



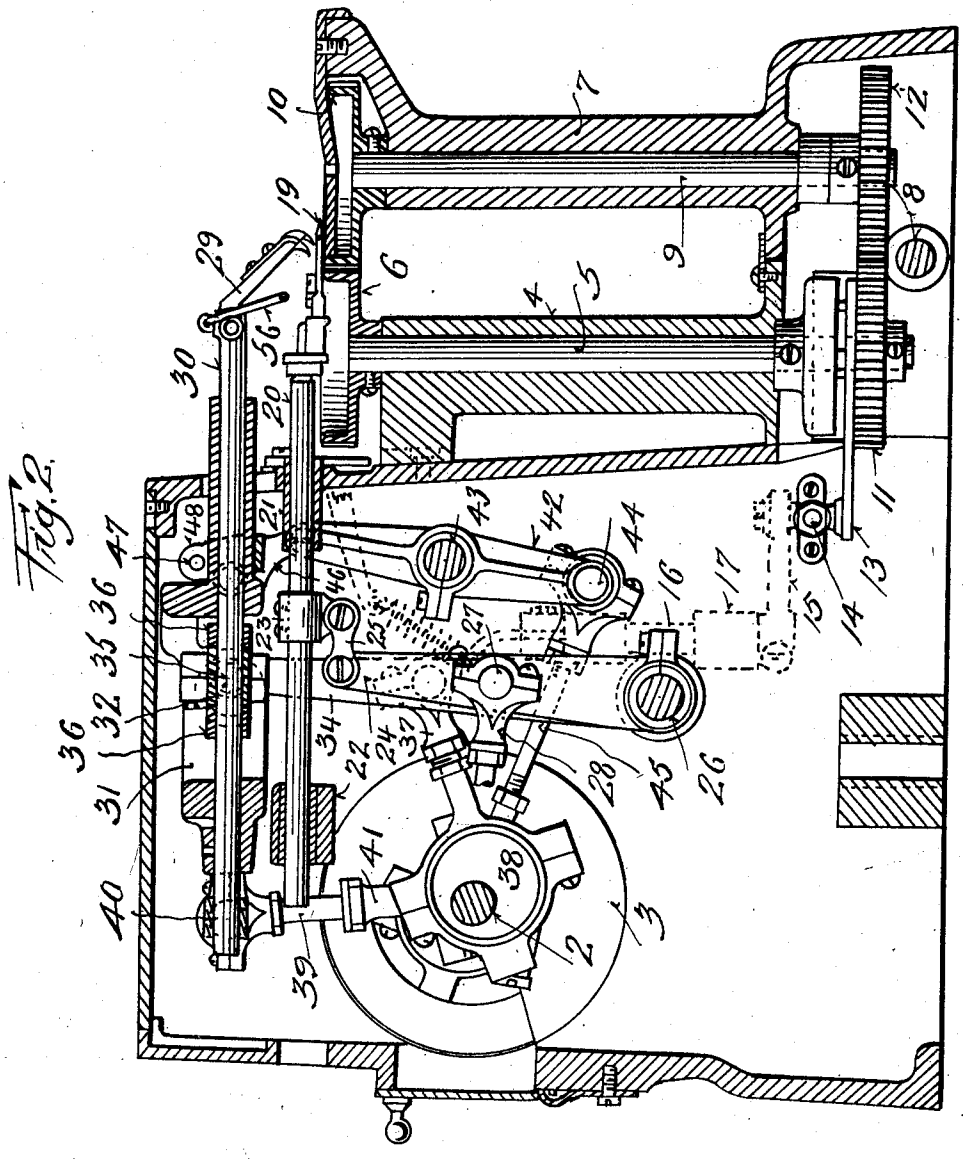
Inventor
Paul D. Redcay
By his Attorneys
Darby & Darby

Aug. 11, 1931. P. D. REDCAY 1,818,753

END TRIMMING MECHANISM FOR CUP FEED OVERSEAMING MACHINES

Filed April 20, 1928 4 Sheets-Sheet 2

Fig. 2.



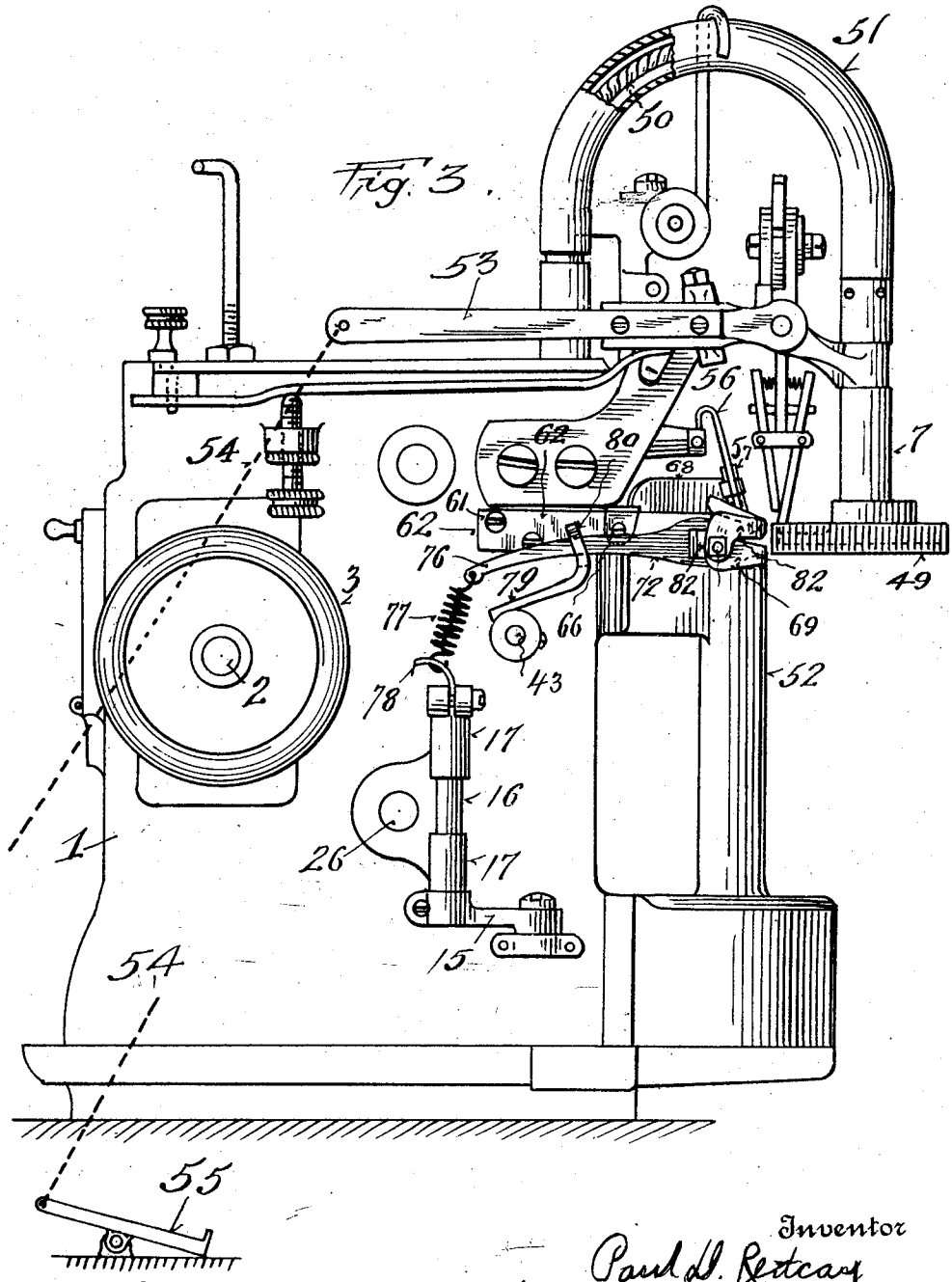
Inventor
Paul D. Redcay
By his Attorneys
Darby & Darby

Aug. 11, 1931. P. D. REDCAY 1,818,753

END TRIMMING MECHANISM FOR CUP FEED OVERSEAMING MACHINES

Filed April 20, 1928 4 Sheets-Sheet 3

Fig. 3.



Inventor
Paul D. Redcay
By his Attorneys
Darby & Darby

Aug. 11, 1931. P. D. REDCAY 1,818,753

END TRIMMING MECHANISM FOR CUP FEED OVERSEAMING MACHINES

Filed April 20, 1928 4 Sheets-Sheet 4

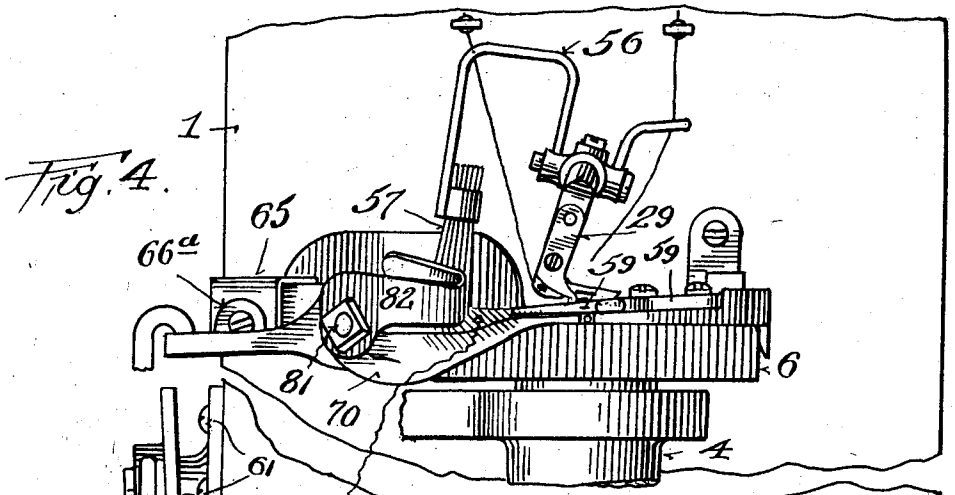


Fig. 4.

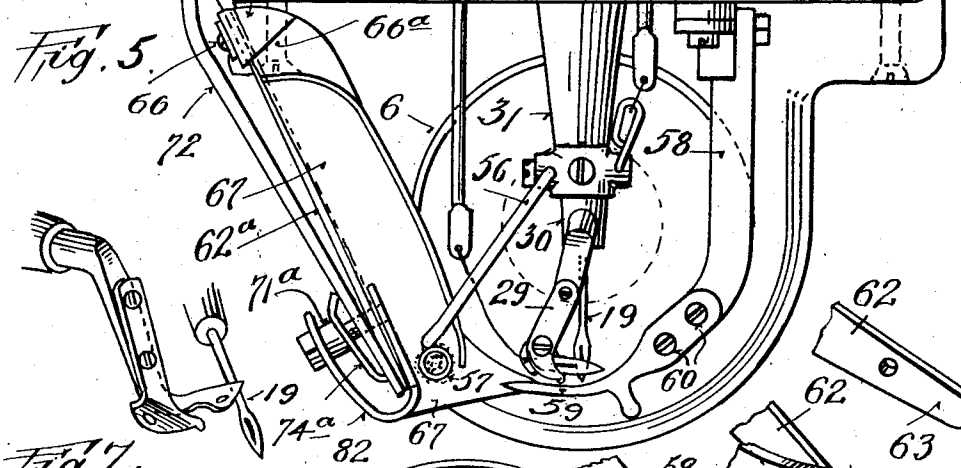


Fig. 5.

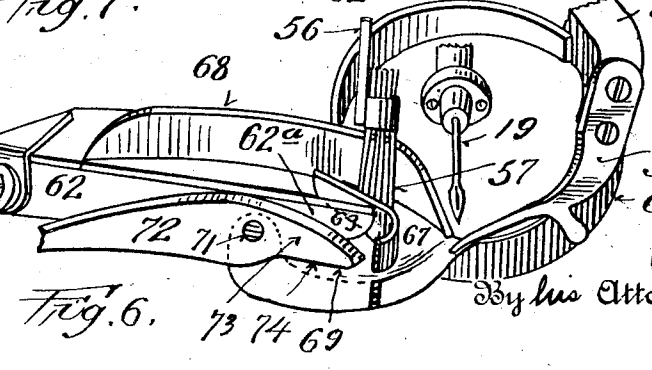


Fig. 6.

Fig. 7.

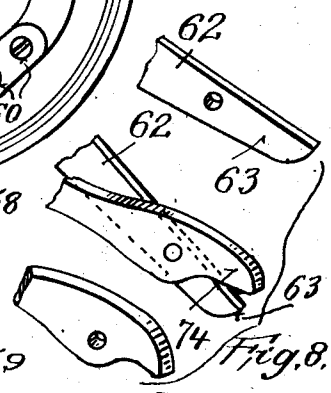


Fig. 8.

Inventor

Paul D. Redcay

By his Attorneys Darby & Darby

Patented Aug. 11, 1931 1,818,753

UNITED STATES PATENT OFFICE

PAUL D. REDCAY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO GOTHAM SILK HOSIERY COMPANY, INC., OF NEW YORK, N. Y., A CORPORATION OF DELAWARE

END TRIMMING MECHANISM FOR CUP FEED OVERSEAMING MACHINES

Application filed April 20, 1928. Serial No. 271,460.

My invention relates to an end trimming mechanism for use in connection with an overseaming machine of the type known as a "cup feed machine".

The object of the invention is to provide an end trimming mechanism for a machine of the above mentioned type which trims or cuts the ends of the threads forming the overseam, produced by the needle and looper, after said overseam has been completed.

A further object of the invention is to provide an end trimming mechanism which trims or cuts the ends of the threads forming the overseam at a point closely adjacent to the said seam.

A further object of the invention is to provide an end trimming mechanism of the above mentioned character which is automatically actuated by the operating devices for the stitch forming elements of the machine.

Other objects of the invention will appear more fully hereinafter.

In an overseaming machine of the cup feed type there are employed two feed wheels which are disposed so as to support the fabric to be stitched in a vertical plane. These feed wheels are actuated so as to feed the fabric to a stitching mechanism. The fabric is positioned between the feed wheels so that it extends slightly above the edges of the wheels and a needle carried by a horizontally reciprocating needle bar is caused to be moved into and out of the material while a looper mechanism cooperates with the needle first on one side of the fabric and then the other, moving over the edge of the fabric so as to lay threads around the edge of the material and thus form an overedge connecting seam for the piece of fabric being stitched.

After the overedge connecting seam has been completed by the above stated operation of the stitching mechanism the threads which have been used to form the seam are cut off at the end of the seam and the fabric removed from the machine. In ordinary practice, the operator of the machine does not take the time to cut these threads close to the seam, but merely clips the threads at any length that happens to be in the path of the particular cutting means that may be employed. In some instances the cutting means employed is a knife blade secured to the frame of the machine adjacent the feed wheels. In other instances the operator uses a separate knife or scissors.

The haphazard cutting of the ends of the thread in this manner upon the completion of the overseaming operation necessitates the further cutting of the same close to the seam by another employee before the fabric can be used or placed upon the market for sale as long as the ends of thread at the end of the seam left there by the operator of the overseaming machine creates an unfinished and unsightly appearance if left attached to the fabric.

It is the special purpose of my present invention to provide a cutting mechanism which will automatically cut the ends of the threads forming the overseam, at the end of the seaming operation, close to the seam and thereby produce a completely finished product and eliminate the necessity of a second cutting of said threads by another operator.

The invention consists substantially in the combination, construction, location and relative location of the parts all as will be more fully hereinafter set forth as shown in the accompanying drawings and finally pointed out in the claims.

In the drawings,—

Figure 1 is a side elevation of an overseaming machine of the cup feed type showing my end trimming mechanism applied thereto.

Fig. 2 is a vertical sectional view of the machine showing the devices for operating the needle and looper in side elevation and the relative location of parts of the elements forming my end trimming mechanism in dotted lines.

Fig. 3 is a side elevation of another type of overseaming machine showing my end trimming mechanism applied thereto.

Fig. 4 is a broken view in front elevation of the cutting mechanism showing its position on the machine with respect to the position of the looper and one of the feed wheels.

Fig. 5 is a broken view in plan of the parts illustrated in Fig. 4.

Fig. 6 is a broken view showing the end trimming mechanism and associated parts in perspective.

Fig. 7 is a detailed broken view of the needle and looper.

Fig. 8 shows broken detail views of the cutting ends of the cutting blades used in my end trimming mechanism.

A typical cup feed overseaming machine to which my end trimming mechanism is applicable is illustrated in Figures 1 and 2. The mechanisms for operating the feed wheels, looper and needle are housed in the casing 1. These mechanisms are designed and constructed to be actuated in timed relation by a main drive shaft 2 which is mounted in suitable journals carried by the casing and which carries a belt wheel 3 at each end thereof.

The operating mechanism for the feed wheels, a looper and needle are illustrated in Figure 2.

At the front of the casing there is a bracket 4 in which is mounted a shaft 5 which carries at its upper end a feed wheel 6. A second bracket 7 is pivoted to bracket 4 at 8. Mounted in bracket 7 is a shaft 9 which carries at its upper end a feed wheel 10. The shafts 5 and 9 at their lower ends have intermeshing gears 11 and 12 so that the feed wheels 6 and 10 may be caused to travel in unison in opposite directions so as to feed the fabric to the stitching mechanism. The shaft 5 is intermittently actuated by a reciprocating arm 13 which carries friction clutch devices of the usual well known construction. The arm 13 moves about the axis of the shaft 5 as a center and is vibrated by a link 14 which is connected to an arm 15 mounted on a shaft 16 journaled in bearings 17. The shaft 16 at its upper end carries an arm 18 which projects into the casing. The inner end of this arm (not shown) has a ball stud connection with a link formed as part of an eccentric strap which cooperates with an eccentric on the main shaft 2.

The above described mechanism is adapted to cause the main shaft to positively actuate the feed wheels and is of the usual construction and forms no part of the present invention.

The needle 19 is mounted in a needle bar 20 which reciprocates in bearings 21 and 22. The needle bar reciprocates in these bearings in a horizontal plane and causes the needle to move back and forth directly above the upper edges of the feed wheels 6 and 10 and to penetrate the fabric extending above and being fed by the feed wheels. Secured to the needle bar is a collar 23 which is connected to lever 24 by link 25. (See Fig. 2.) The lever 24 is adapted to turn freely on a shaft 26 carried by journals in casing 1. The lever 24 between its ends has a ball stud 27 to which is pivotally connected a link 28. The opposite end of link 28 is formed with an eccentric strap which cooperates with an eccentric on the main shaft 2. As the main shaft rotates the eccentric positively vibrates the lever 24 which in turn through the link connection 25 reciprocates the needle.

The looper is illustrated at 29 and is mounted in a looper rod 30. The looper rod is supported by a double yoke support 31 which carries at each side a stud shaft 32 mounted in journals 33. These stud shafts are in axial alignment and allow the looper rod support to swing so as to move the rod in a vertical plane. The looper rod is reciprocated in the looper rod support 31 by a lever 34. The lever 34 is fulcrumed on the shaft 26 and is adapted to turn freely thereon. The upper end of lever 34 is connected to a ball stud mounted on a sleeve 35 journaled between fixed collars 36 secured to the looper rod. The fixed collars 36 prevent the sleeve 35 from endwise movement but allow the looper rod to turn in the sleeve. The lever 34 has a ball stud which is pivotally connected to link 37. The link 37 is connected with an eccentric strap which cooperates with eccentric 38 on the main shaft.

The rotation of the main shaft through the above described connecting mechanism causes the looper rod to be moved endwise in support 31. This end wise movement of the looper rod causes the looper to move from one side of the fabric, being operated on, to the other and lays the threads over the edge of the fabric.

The means for oscillating the looper rod to carry the looper into and out of the needle loop consists of a link 39 which is connected at one end to a stud 40 which is secured to the looper rod 30 and at the other end to an eccentric strap 41 which cooperates with an eccentric on the main shaft 2. When the main shaft rotates the link is moved endwise and causes the looper rod to oscillate or work on its own axis.

The looper is caused to be raised so as to carry it over the edge of the material as it is moved from one side to the other by the following mechanism. A lever 42 is mounted to rock with a rock shaft 43 journaled in suitable bearings in the casing 1. The lower end of lever 42 is pivoted at 44 to a link 45 which is secured to an eccentric strap cooperating with an eccentric on the main shaft 2. The upper end of lever 42 is pivoted to a link 46 which in turn is pivoted to a ball stud 47 carried by a collar 48 secured to looper support 31. The pivotal connection between the link 46 and lever 42 moves from one side of a vertical line passing through the fulcrum of the lever and the ball stud 47 to the other side thereof so that as the lever 42 is given a com-

plete oscillation the looper rod is lowered and raised twice.

The above described mechanisms for actuating the feed wheels, needle and looper cooperate with each other to move these parts in timed relation with respect to each other. As the fabric is fed forward by the feed wheels, the needle is caused to pass through the fabric and the looper caused to be moved forward into the needle loop thrown out by the needle. The looper in the needle loop is then raised and moved laterally to the other side of the fabric and then lowered so that the needle on its next stroke passes between the looper thread and the body of the looper. The looper is then again raised and swung so as to be withdrawn from the needle loop. The looper is then again carried across the fabric to the other side thereof and is positioned to again enter the needle loop.

The type of machine shown in Fig. 3 operates in substantially the same way except the outer feed wheel 49 is rotated by a flexible shaft 50 supported in the gooseneck 51. The flexible shaft 50 is actuated by suitable gearing cooperating with gearing secured to the shaft mounted in support 52 (not shown) upon which the rear feed wheel is secured. In this type of overseaming machine the feed wheel 49 is moved away from the rear wheel by means of a lever 53 operated by a chain 54 secured to a foot treadle 55.

The structures so far described are or may be of the usual or any well known type or structure and in the specific details thereof form no part of my present invention.

The end trimming mechanism of my present invention is adapted to be applied to machines of the above described types and consists of the following:

Secured to the looper bar 30 by suitable means as a screw 27′, and adapted to operate in conjunction with the same, is an arm 56. Attached to the free end of this arm is a brush 57.

Mounted on the casing 1 of the machine is the usual stitch tongue support 58 having the stitch tongue 59 secured to its end in any suitable manner such as by screws 60. During the overseaming operation of the needle and looper, the loops formed by said needle and looper are formed around the stitch tongue in the usual and well known manner and said loops are carried off the said tongue as the fabric is progressed by the feed wheels 6 and 10.

Attached to the side of the casing 1 of the machine in any suitable manner such as by screws 61 is a cutting plate 62. The forward portion 62*a* of said plate is bent so that the end 63 which is formed with a cutting edge extends beyond the casing and alongside of the feed wheel 6. The cutting plate 62 is provided with a guard 67. The guard is secured to the plate at 65 by any suitable means such as screw 66, and also to the casing 1 by screw 66*a*. Said guard is formed with the curved side portion 68 and a base portion 69. The base portion extends underneath and beyond the forward end of the plate portion 62*a* and is bent downwardly as indicated at 70 at its forward end and is also shaped so that it may be secured to a supporting pin 71. The supporting pin 71 also supports the forward end of cutting plate 62 and a cooperating cutting plate 72. The base portion of the guard 67 is positioned so that it lies adjacent to and parallel with the upper edge of the feed wheel 6 as clearly shown in Figs. 4, 5 and 6.

Pivotally mounted on the supporting pin 71 is a movable cutting plate 72. The forward portion 73 of said plate is bent so that its cutting edge 74 extends in cutting relation with the cutting edge 63 of the cutting plate 62. The cutting portion of cutting plate 72 is held in cutting contact with the cutting edge of plate 62 in any suitable manner such as by a spring plate 74*a* which is mounted on the pivot pin 71 between the cutting plate 72 and the head 71*a* of said pin.

Secured to the pivot pin 71 by means of a nut 81 is a guard 82 which is formed so that it extends around the ends of the plates 62 and 72 and slightly above the base portion 69 of guard 67.

The rear portion 75 of the pivoted cutting plate 72 extends approximately parallel with the side of the casing and is secured at its end 76 to a spring 77 (see Fig. 1). One end of the spring 77 is secured to the bearing 17 in any suitable manner such as by a hook 78.

The pivoted cutting plate 72 is actuated in any suitable manner by an operating part of the machine. One means for accomplishing this result is shown in Fig. 1. The rear portion 75 of the pivoted cutting plate 72 is positioned so that it passes through a slot in the bent up portion 80 of a lifting lever 79. The lifting lever is secured to a collar fixedly mounted on the shaft 43. When the shaft 43 is oscillated it causes the lifting lever 79 to raise and lower the cutting plate 72 creating a scissors action between the cutting edge 74 thereof and the cutting edge 63 of the cutting plate 62.

In the operation of the end trimming mechanism it will be apparent that as the looper is operated by its several connections to the main shaft 2, the movements imparted thereto will cause the brush 57, mounted on the arm 56 which is secured to the looper to continuously sweep back and forth across the base portion of the guard 67 between the sides 68 thereof and the side portion of guard 82. The movements imparted to the looper, as pointed out above, cause it to move forward into the needle loop thrown out by the needle after the needle has penetrated the fabric, after which the looper is raised and then

moved laterally to the other side of the material where it is lowered and positioned so that the needle on its next stroke will pass beween the looper thread and the body of the looper after which the looper is raised gradually and again swung so as to be withdrawn from the needle loop to permit the setting of the stitch. When the looper is raised and moved laterally to the outside of the fabric the brush 57 is caused to be raised from the base plate and towards the fabric which is passing between the feed wheels 6 and 10. As the looper is then raised and again swung to the inside of the fabric, and lowered the brush is caused to be lowered so that it sweeps any thread in its path, between the lower edge of guard 82 and the base plate 69 of guard 67 and into the path of the cutting edges of the cutting plates 62 and 72.

The oscillating movement of the shaft 43 causes the lifting lever 79 to raise and lower the cutting plate 72 on the pivot pin 71 and the shearing action of the cutting edges 63 and 74 of plates 62 and 72 clips the thread swept in their path.

The downwardly curved portion 69 of the base plate 67 and the sides of guard 82 act to prevent the fabric being stitched, from passing into the path of the cutting plates.

It will be seen that as the stitching of the fabric is completed the ends of the stitch threads are brushed into the path of the cutting plates and are then cut off close to the stitched fabric without any special guiding or manipulation of the fabric on the part of the operator of the machine.

In the description of the end trimming mechanism and the several other parts of the machine I have not shown or described the thread control devices for the needle and looper as the present invention is directed solely to the end trimming mechanism and the devices for imparting movement to the parts of same. The thread control devices of the machine are constructed and operate in the usual manner as well known to those skilled in the art.

It is obvious that changes in the details of construction and the arrangement of parts may be made without departing from the spirit and scope of my invention, as set forth in the appended claims.

What I seek to secure by United States Letters Patent is:

1. In an overseaming sewing machine, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism, in combination with means including a stationary cutting member and a movable cutting member for trimming the ends of the threads of the seam formed by the said needle and looper mechanisms, and means for operating the trimming device from the actuating means of the looper mechanism.

2. In an overseaming sewing machine, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism in combination with means for trimming the ends of the thread of the seam made by said needle and looper mechanism, said means consisting of a stationary cutting member secured to the frame of the machine, a movable cutting member pivotally connected to said stationary member so as to have a shearing action therewith, and means for actuating said movable cutting member from the operating means of the looper mechanism.

3. In an overseaming sewing machine, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism in combination with means for trimming the ends of the thread of the seam made by said needle and looper mechanism, said means consisting of a stationary cutting member secured to the frame of the machine, a movable cutting member pivotally connected to said stationary member so as to have a shearing action therewith, and means for actuating said movable cutting member from the operating means of the looper mechanism and means for guiding the threads to be cut into the path of the cutting edges of said cutting members.

4. In an overseaming sewing machine, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism, in combination with means for trimming the ends of the thread of the seam made by said needle and looper mechanism, said means consisting of feed wheels and a stationary cutting member secured to the frame of the machine, a movable cutting member pivotally connected to said stationary member so as to have a shearing action therewith, guards for said cutting members, means for actuating said movable cutting member from the operating means of the looper mechanism and means for guiding the threads to be cut into the path of the cutting edges of said cutting members.

5. In an overseam sewing machine, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism in combination with means for trimming the ends of the thread of the seam made by said needle and looper mechanism, said means consisting of a stationary cutting member secured at one end thereof to the frame of the machine and formed with a cutting edge at its other end, a guard secured to said cutting member, a movable member formed with a cutting edge

and pivotally secured to said stationary cutting member, means for maintaining said cutting edge of said movable member in shearing contact with the cutting edge of said stationary member, a guard for the ends of said cutting members, means for actuating said movable member from the operating means of the looper mechanism and means actuated by the looper mechanism to guide the threads to be cut into the path of the cutting edges of said cutting members.

6. In an overseaming sewing machine, a needle and a looper mechanism, means for actuating the same, and means for feeding the material to be stitched to and from said needle and looper mechanism, in combination with a trimming mechanism for trimming the ends of the threads of the seam formed by said needle and looper mechanism consisting of a stationary cutting member, a movable cutting member pivotally connected thereto, a guard for the ends of said cutting members, means for automatically actuating the said movable cutting member from the operating means of the looper mechanism and means secured to the looper mechanism and actuated thereby to guide the threads to be cut into the path of the cutting edges of said cutting members.

7. In an overseaming sewing machine, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism, in combination with a trimming mechanism for trimming the ends of the threads of the seam formed by the said needle and looper mechanism consisting of a stationary cutting member, a movable cutting member co-operating therewith, a guard for said stationary cutting member, a guard for the ends of said cutting members, means actuated by the operating means for the looper mechanism to operate the movable cutting member, means actuated by the looper mechanism to guide the threads to be trimmed into the path of the cutting members.

8. A cutting mechanism for cutting the threads of an overseaming sewing machine comprising a stationary cutting member secured to the frame of the machine, a movable cutting member pivotally connected to said stationary member so as to have a shearing action therewith, means for actuating said movable cutting member, means for guiding the threads to be cut into the path of the cutting edges of said cutting members and feed wheels for advancing the material.

9. A cutting mechanism for cutting the threads of an overseaming sewing machine, comprising a stationary cutting member secured to the frame of the machine, a movable cutting member pivotally connected to said stationary member so as to have a shearing action therewith, a guard for said cutting members, means for actuating said movable cutting member, means for guiding the threads to be cut into the path of the cutting edges of said cutting members and a feed wheel for advancing the material, the upper edge of said feed wheel and the lower edge of said guard lying substantially in the same plane.

10. A cutting mechanism for cutting the threads of an overseaming sewing machine comprising a stationary cutting member secured at one end thereof to the frame of the machine and formed with a cutting edge at its other end, a guard secured to said stationary cutting member, a movable cutting member formed with a cutting edge and pivotally secured to said stationary cutting member, means for maintaining said cutting edge of said movable member in shearing contact with the cutting edge of said stationary member, a guard for the ends of said cutting members, means for actuating said movable cutting member from the operating means of the overseaming sewing machine, and means for guiding the threads to be cut into the path of the cutting edges of said cutting members and a feed wheel and means cooperating therewith for advancing the material.

11. In an overseaming sewing machine, the combination of a needle and looper mechanism, means for operating the same, means for feeding the material to be stitched to and from said needle and looper mechanism, a stationary cutting member, a movable cutting member cooperating therewith, means actuated by the operating means for said looper mechanism to operate said movable cutting member, means secured to said looper mechanism and actuated thereby to direct the ends of threads of the seam formed by said looper and needle in said fabric into the path of the cutting members.

12. In an overseaming machine, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism in combination with means for trimming the ends of the threads of the seam made by said needle and looper mechanisms consisting of a stationary cutting member secured to the frame of the sewing machine, a movable cutting member pivotally connected with said stationary cutting member so as to have a shearing action therewith, means to yieldingly maintain said movable member in shearing contact with said stationary cutting member, a guard for the cutting ends of said cutting members, a guard for the stationary cutting member, a brush secured to the looper mechanism and adapted to be actuated thereby so as to brush the threads to be trimmed under the guard for the ends of the cutting members into the path of the cutting edges of said cutting members.

13. In a sewing machine of the class described, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism, in combination with trimming mechanism consisting of a fixed cutting blade secured to the frame of the machine, a movable cutting blade pivoted to and cooperating with the said fixed cutting blade, a lever secured to said movable cutting blade and to and operating with an operating shaft for said looper mechanism, and adapted to actuate said movable cutting blade, a guard adapted to protect the fabric being stitched from being cut by said cutting members, a brush secured to said looper mechanism and operating therewith to brush the threads of the looper and needle mechanisms under said guard and into the path of the cutting members.

14. In a sewing machine of the class described, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism, in combination with a trimming mechanism for trimming the ends of the thread of the seam made by the looper and needle mechanism consisting of a stationary cutting blade secured at one end to the frame of the machine and having a cutting edge formed at its other end, a movable cutting blade pivotally secured to said stationary cutting blade and having a cutting edge formed at one end thereof, a spring secured to the other end of said movable cutting blade, and adapted to normally hold the cutting edge thereof in open position with respect to the cutting edge of the stationary blade, a lever secured to said movable cutting blade and actuated by the operating means of the looper mechanism to raise and lower said movable cutting blade so that it has a shearing action with said fixed cutting blade, a brush secured to the looper mechanism and actuated thereby so that it will brush the ends of the threads to be trimmed into the path of the cutting edges of said cutting blades, and a guard secured to the cutting members to prevent the fabric from coming into contact with the cutting members.

15. In an overseaming sewing machine, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism, in combination with a trimming mechanism for cutting ends of the threads of the seam formed by the said looper and needle mechanism, comprising a fixed and a movable cutting member, a lever secured to the movable cutting member and actuated by the operating means of the looper mechanism to effect a scissors action between the cutting edge of said movable cutting member and the cutting edge of the fixed cutting member, means secured to the looper mechanism to effect the feeding of the threads to be cut into the path of the cutting edges of said cutting members, and means to prevent the said feeding means from feeding the fabric being stitched into the path of said cutting members.

16. In an overseaming sewing machine, a needle and a looper mechanism, means for actuating the same and means for feeding the material to be stitched to and from said needle and looper mechanism in combination with a trimming mechanism for cutting the ends of the threads of the seam formed by the said looper and needle mechanism comprising a fixed cutting member secured at one end to the frame of the machine and having its other end extending adjacent to the means for feeding the material to and from the looper and needle mechanism, a movable cutting member pivotally secured to said fixed cutting member so that its cutting edge has a shearing contact with the cutting edge of said fixed cutting member, a spring for maintaining said movable cutting member in shearing contact with the fixed cutting member, a guard secured to said fixed cutting member positioned so as to prevent the material being stitched from passing between the fixed cutting member and the feeding means, a guard for the ends of said cutting members adapted to prevent the material being stitched from passing from the feeding means into the path of the cutting members, and a brush secured to the looper mechanism and operating therewith and adapted to brush the threads to be cut into the path of said cutting members.

In testimony whereof I have hereunto set my hand on this seventeenth day of April, A. D. 1928.

PAUL D. REDCAY.