

March 2, 1965

J. N. COVERT

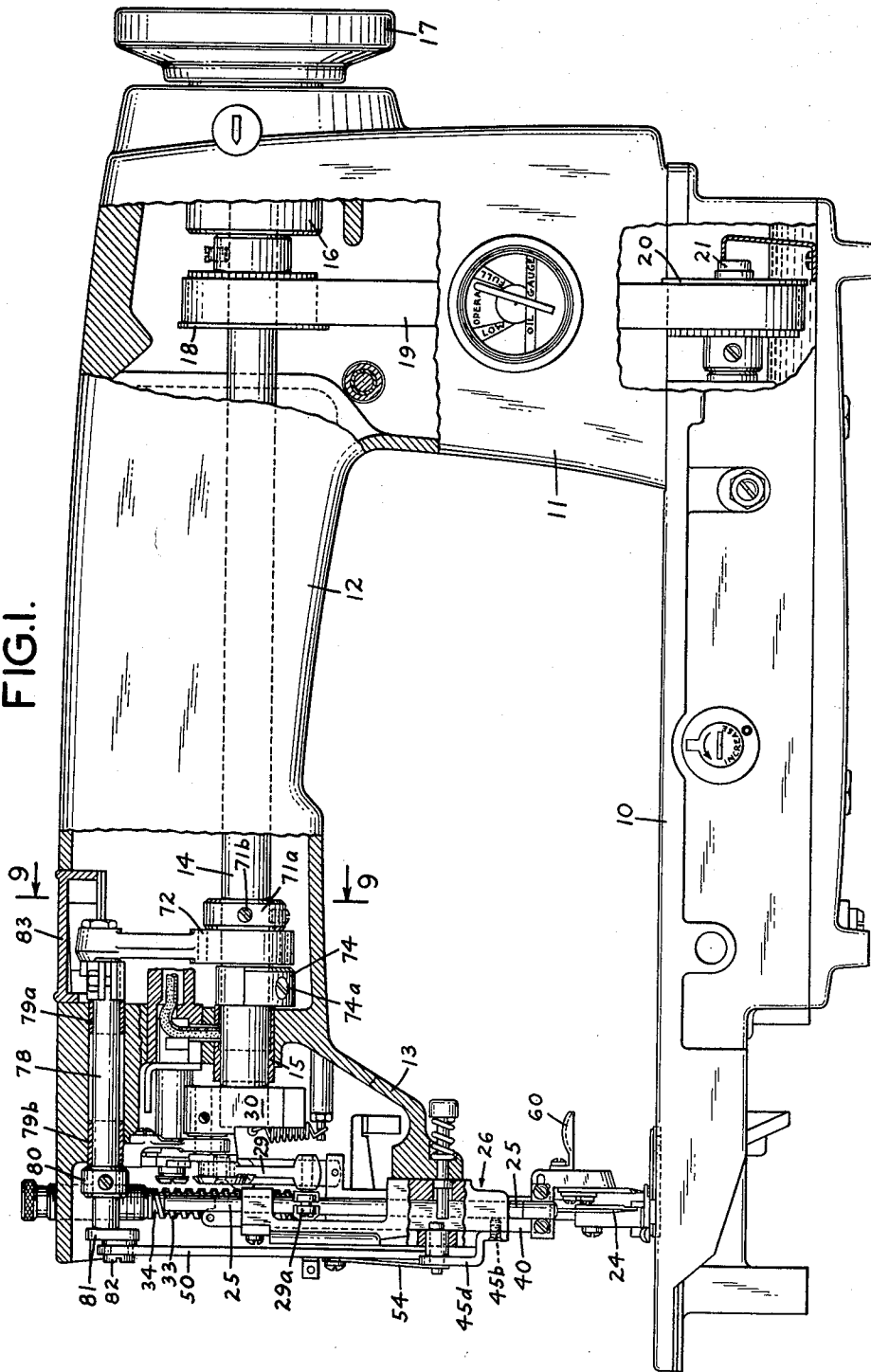
3,171,372

EDGE TRIMMING MECHANISM FOR SEWING MACHINES

Filed Jan. 29, 1963

5 Sheets-Sheet 1

FIG. 1.



March 2, 1965

J. N. COVERT

3,171,372

EDGE TRIMMING MECHANISM FOR SEWING MACHINES

Filed Jan. 29, 1963

5 Sheets-Sheet 2

FIG. 2.

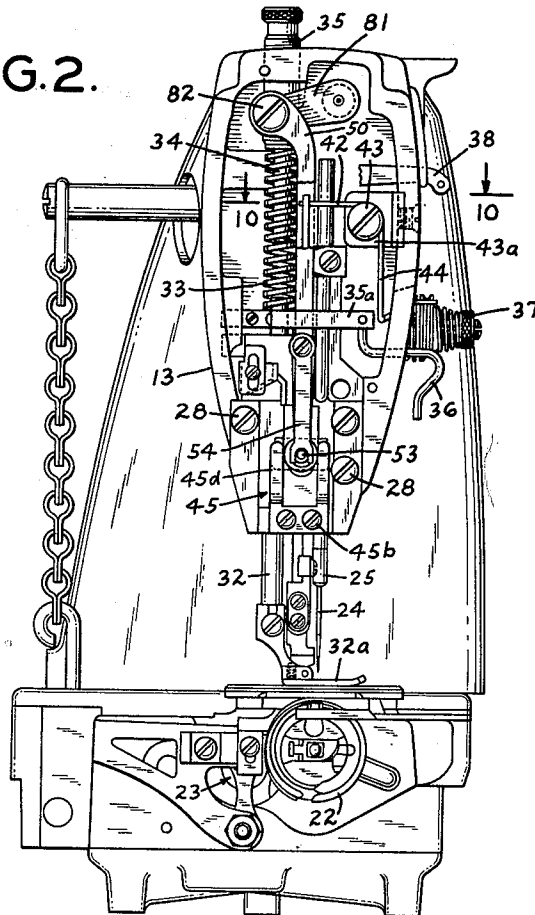


FIG. 13.

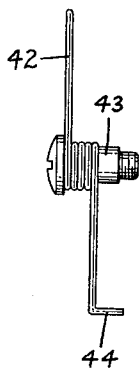


FIG. 12.

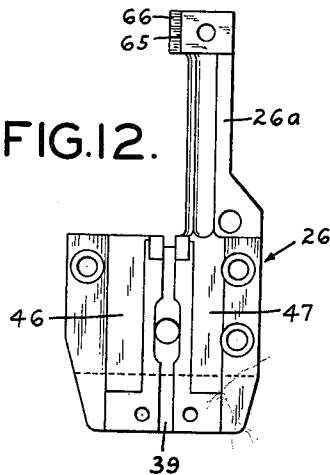
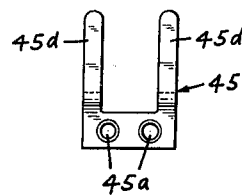


FIG. 14.



March 2, 1965

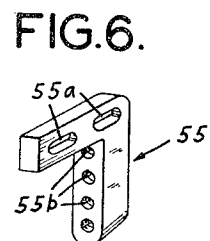
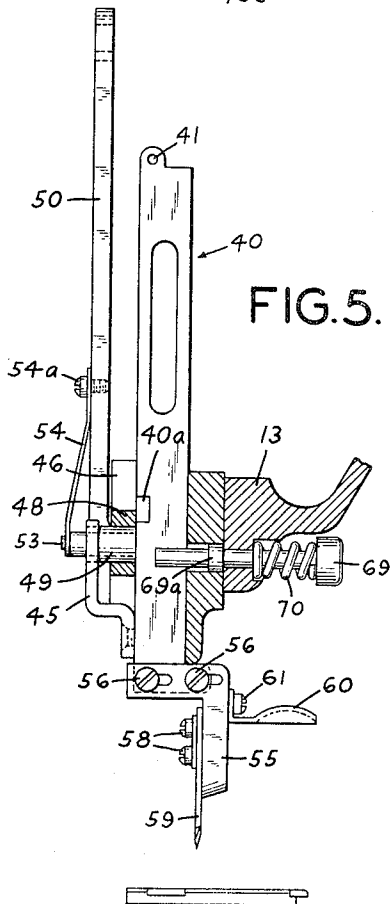
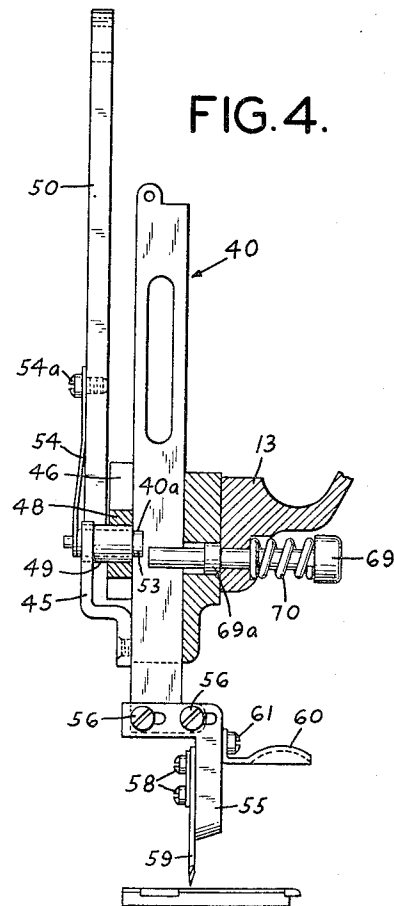
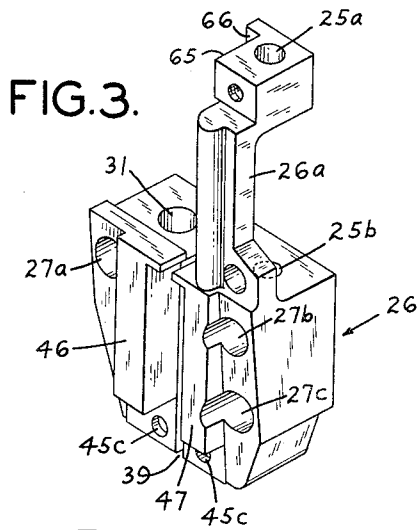
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3,171,372

EDGE TRIMMING MECHANISM FOR SEWING MACHINES

Filed Jan. 29, 1963

5 Sheets-Sheet 3



March 2, 1965

J. N. COVERT

3,171,372

EDGE TRIMMING MECHANISM FOR SEWING MACHINES

Filed Jan. 29, 1963

5 Sheets-Sheet 4

FIG. 7.

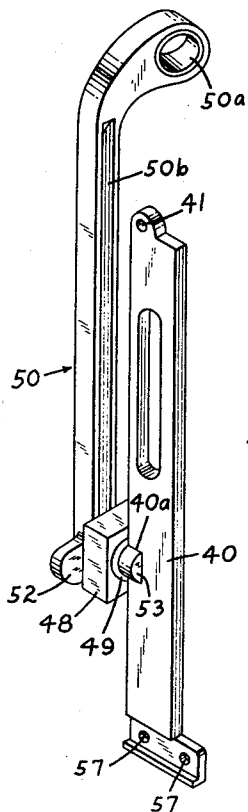


FIG. 8.

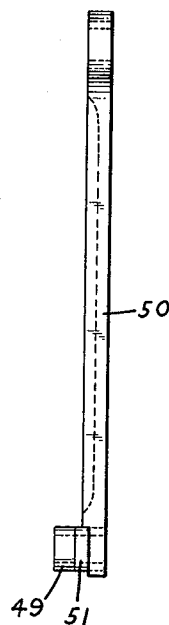


FIG. 9.

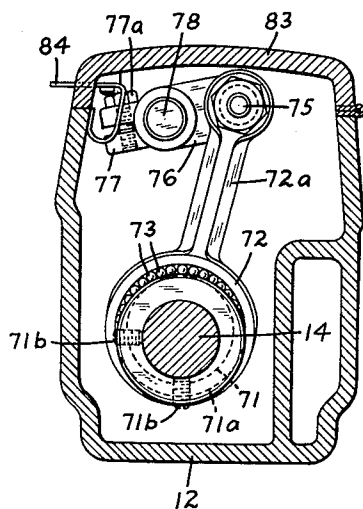


FIG. 10.

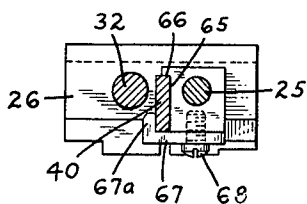
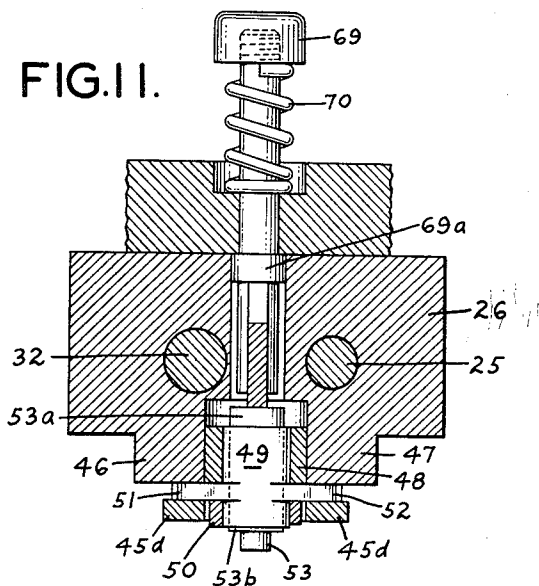


FIG. 11.



March 2, 1965

J. N. COVERT

3,171,372

EDGE TRIMMING MECHANISM FOR SEWING MACHINES

Filed Jan. 29, 1963

5 Sheets-Sheet 5

FIG.15.

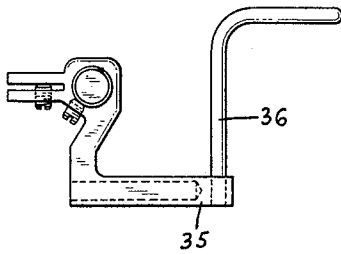


FIG.16.

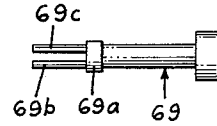


FIG.18.

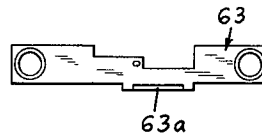


FIG.17.

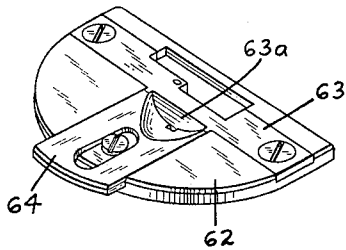


FIG.19.

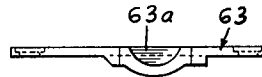


FIG.21.

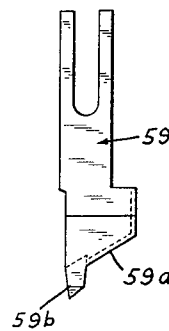
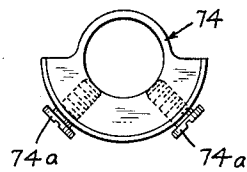


FIG.20.



1

2

3,171,372 EDGE TRIMMING MECHANISM FOR SEWING MACHINES

John N. Covert, Lombard, Ill., assignor to Union Special
Machine Company, Chicago, Ill., a corporation of
Illinois

Filed Jan. 29, 1963, Ser. No. 254,807
10 Claims. (Cl. 112—123)

This invention relates to improved mechanism for trim-
ming the edge of work being fed to the stitch forming
point of a sewing machine. It is particularly concerned
with the provision of such mechanism on a high speed,
industrial sewing machine of the lockstitch type. How-
ever, the invention is applicable to machines of other
types.

An important purpose of the invention has been to
provide a unitary construction adapted for simple appli-
cation to existing sewing machines, or to new machines
having an overall standard construction, for the addition
thereto of edge trimming mechanisms by simple replace-
ment of existing parts by the novel unit, or the employ-
ment of the novel unit in lieu of other standard parts.
Thus the new unit may be applied to existing sewing
machines with relatively simple changes in the frame
structure, or it may be used as an alternative member of
new machines intended for a variety of different purposes.
The unitary construction is such that it may be readily
replaced if the parts become worn, or if some error is
noted in the construction of the unit which renders it
unsuitable for use in connection with the main frame
structure of the machine. Toward this end the unit em-
bodies the main elements whose relationship may be
critical in the complete machine.

A further purpose of the invention has been to pro-
vide a simple and highly improved mechanism for operat-
ing the edge trimming mechanism. This is of such char-
acter that the trimmer mechanism is capable of opera-
tion at high speed without developing the objectionable
resonant vibrations normally encountered with trimmer
mechanisms of the prior art. A feature of this aspect
of the invention is the provision of a torsion spring,
rather than a coil spring, in the connections for lifting
the movable trimmer blade into an inactive position. It
has been found that prior mechanisms employing a coil
spring for the indicated purpose have developed serious
resonant vibration difficulties which have made truly high
speed operations impracticable. This appears to be due
to the reaction of the spring in response to the driving
force applied to the movable trimmer blade when it is
in active operation.

Another purpose of the invention has been to provide
simple and readily operable means, under the control of
the operator, for rendering the trimming mechanism oper-
ative or inoperative at will. A feature of this aspect of
the invention is the provision of a manually depressible
member engageable by the right hand of the operator to
bring the trimming mechanism into operation and a push
button, also readily accessible to the right hand of the
operator, for rendering the trimming mechanism inactive.
To make possible the convenient location of the push
button, the connections for driving the trimmer mechanism
includes a reciprocatory pitman extending downwardly
adjacent, and substantially parallel with a member that
carries the trimmer blade. The latter member is mounted
for longitudinal reciprocation. Another feature of this
aspect of the invention is the provision of a stem, con-
nected with the push button, which straddles the member
that carries the trimmer blade and enables the end of this
stem to engage a pin that connects the constantly recip-
rocating pitman with the movable cutter blade carrying

member, thereby disabling the driving connection for the
movable trimmer blade. While this is not an essential
feature, it makes possible a very compact and reliable
arrangement for enabling and disabling the trimmer
mechanism.

Still another feature of the invention is the provision
of simple and reliable connections from the main drive
shaft of the sewing machine for reciprocating the pitman
that operates the movable cutter blade carrier whenever
desired. This involves a cam or an eccentric on the main
shaft of the machine that reciprocates the pitman con-
stantly during all operations of the machine.

Other purposes, features and advantages of the inven-
tion will appear from the following detailed description
of a preferred embodiment of the same, which will now
be given in connection with the accompanying drawings,
in which:

FIG. 1 is a front elevational view of a sewing machine
embodying the invention, with certain portions broken
away and shown in vertical section;

FIG. 2 is an end view of the sewing machine, as seen
from the left in FIG. 1, with a cover plate for the end
of the head of the overhanging arm omitted;

FIG. 3 is a perspective view of a frame member which
carries as a unit the presser bar, needle bar, and a trim-
mer bar which carries an edge trimming blade;

FIG. 4 is a detail view, in vertical section through a
portion of the frame member of FIG. 3, a portion of the
head of the overhanging arm of the sewing machine and
various parts identified with the edge trimming mecha-
nism;

FIG. 5 is a view similar to FIG. 4, but shows the edge
trimming mechanism in an inoperative position;

FIG. 6 is a perspective view of a member which carries
the trimmer blade of the edge trimming mechanism;

FIG. 7 is a perspective view of the trimmer blade carry-
ing bar and a pitman which serves to operate the same;

FIG. 8 is a side elevational view of the pitman shown
in FIG. 7, as seen from the right in FIG. 7;

FIG. 9 is a vertical sectional view through the over-
hanging arm taken along the line 9—9 of FIG. 1;

FIG. 10 is a horizontal sectional view taken along the
line 10—10 of FIG. 2, showing the frame member of
FIG. 3 in plan and related parts in section;

FIG. 11 is an enlarged horizontal sectional view through
the frame member shown in FIG. 3 with various parts
assembled thereon;

FIG. 12 is a front elevational view of the frame mem-
ber shown in FIG. 3;

FIG. 13 is a plan view of a torsion spring, with its sup-
porting stud, used to lift the trimmer blade carrying bar;

FIG. 14 is a face view of a bracket member that is
secured to the frame member of FIG. 3;

FIG. 15 is a plan view of a thread guiding member
secured to the presser bar of the machine;

FIG. 16 is a plan view of a push button or pin adapted
to release the trimmer blade carrying bar from its driving
connections;

FIG. 17 is a perspective view of the throat plate of the
machine carried by the base portion of the frame;

FIG. 18 is a plan view of an insert provided in the
throat plate;

FIG. 19 is a side elevational view of the insert shown
in FIG. 18;

FIG. 20 is a side view of a counter-weight applied to
the main drive shaft of the machine adjacent the trimmer
blade actuating eccentric, and

FIG. 21 is a face view of the trimmer blade adapted
to be mounted on the trimmer bar.

The sewing machine illustrated in the accompanying
drawings is of the lockstitch type shown in the patent to

Covert, No. 2,977,910, granted April 4, 1961. The frame of the machine is essentially the same as shown in said patent, but it will be understood that minor changes have been made, particularly in the region of the head of the overhanging arm, to accommodate the unit which incorporates the presser bar, the needle bar and the trimmer bar with associated devices. A preferred construction of the machine, made in accordance with the present invention, embodies lubrication means of the general character shown in said Covert patent, minor changes being made to accommodate the additional parts employed in accordance with the present invention.

Referring now to the drawings, the main frame of the sewing machine comprises a base portion 10, a vertical standard 11, and an overhanging arm 12 terminating in a head portion 13 in a region above the stitch forming zone of the sewing machine. Within the overhanging arm 12 there is journaled a rotary shaft 14. As shown in FIG. 1, this shaft is journaled adjacent its left end in a bearing sleeve 15 and it is journaled adjacent its right end in a bearing 16. The right end of the shaft 14 extends outwardly from the frame of the machine and has secured thereto a combined hand wheel and pulley 17 through which the shaft is rotated. Within the vertical standard 11, the shaft 14 has secured thereto a pulley 18 which is connected by a belt 19 with a pulley 20 secured to a shaft 21 which extends longitudinally of the base portion 10 of the frame.

The shaft 21 serves to operate a rotary hook 22 (FIG. 2) at a 2 to 1 rate through connections of the character disclosed in the above-mentioned Covert patent. Also it serves to operate a four-motion work feeding mechanism designated generally at 23 in FIG. 2, through connections of the character disclosed in said Covert patent, or of the character disclosed in the patent to Reimer et al., No. 2,538,271, granted January 16, 1951.

Cooperating with the rotary hook 22, in the formation of lockstitches, is a vertically reciprocating needle 24 (FIG. 1). This needle is carried by a needle bar 25 mounted for vertical reciprocation in a frame member or bracket 26 mounted within a cavity or recess provided in the outer end of the head 13 of the overhanging arm. As best shown in FIG. 3, this frame member is provided with horizontally extending passages 27a, 27b and 27c adapted to receive screws 28 (FIG. 2), the inner ends of which cooperate with suitable screw threaded openings adjacent the outer end of the head 13. Member 26 is preferably made of high-strength, ductile iron which is a good bearing material for various reciprocating steel parts, such as the needle bar. Other materials having the desired properties, such as high-strength bronze might be used in lieu of ductile iron. The needle bar 25 is mounted for vertical reciprocation in passages 25a and 25b provided in the frame member 26. Suitable connections for reciprocating the needle bar are provided from the drive shaft 14 carried by the overhanging arm of the sewing machine frame. These connections may suitably be of the character disclosed in the above-mentioned Covert patent, and include a pitman 29 (FIG. 1) having its lower end pivotally connected with a clamping member 29a secured to the needle bar. The upper end of pitman 29 is connected with an eccentrically mounted pin carried by a member 30 secured to the drive shaft 14, which thus imparts the vertical, reciprocating movements to the needle bar, in the manner disclosed in the Covert patent, upon rotation of shaft 14.

In a vertical, cylindrical passage 31 extending through a portion of the frame member 26 (FIG. 3), there is mounted, for up and down movement, a presser bar 32 (FIG. 2) which carries at its lower end a presser foot 32a that is normally urged downwardly into cooperation with the four-motion feed dog forming part of the work feeding mechanism. The presser bar is urged downwardly by a spring 33, the lower end of which surrounds the upper end of presser bar 32, and the upper end of which sur-

rounds a vertically aligned rod or post 34. This rod is carried by a screw threaded member 35 against the lower end of which the upper end of the spring abuts. By turning the screw member 35, the compressive force of the spring 33 may be adjusted. At its lower end, spring 33 engages an arm 35a secured to the presser bar, so as to impart a suitable downward force to the latter by the spring. Arm 35a carries a needle thread engaging and guiding member 36 of the form shown in elevation in FIG. 2 and in plan in FIG. 15. Its special form is such as to provide suitable clearance for various operating parts in the region of the presser bar and needle bar. As will be understood, the purpose of mounting the thread guiding member 36 on the presser bar is to create a certain amount of slack in the needle thread as the presser bar is lifted under manual control to permit introduction and removal of work. Its horizontally extending, thread-engaging portion is located adjacent a thread tensioning device 37 (FIG. 2) through which the needle thread is passed as it advances from a suitable source of supply. The thread as it advances from the thread tensioning device 37 is carried beneath the guide 36, then up to a take-up arm 38 which is given up and down movements by connections of the character disclosed in said Covert patent, and then down to the needle.

Turning now to the edge trimming mechanism of the present invention. The frame member 26 is provided with a vertically extending groove or recess 39 in its forward face adapted to slidably receive a trimmer bar 40. The latter is preferably a flat bar of rectangular cross-section. At its upper end it is provided with an aperture 41 adapted to receive the end of a horizontally extending branch 42 of a torsion spring. This spring is shown in detail in FIG. 13, as removed from the machine. Here the branch 42 extends vertically, but when the spring is applied to the machine, as shown in FIG. 2, the branch is bent downwardly to extend substantially horizontally. The spring is coiled about the stem of a screw stud 43 which is retained by screw threaded engagement with a block 43a secured to the inner face of the front wall of the head 13. A downwardly extending branch 44 of the spring is held in engagement with the inner surface of the front wall of the head 13. This arrangement is such that the torsion spring serves to urge the trimmer bar 40 upwardly. To retain the trimmer bar within the groove or passage 39 there is provided a member 45 (FIG. 14) which in side elevation has the configuration shown in FIGS. 4 and 5. Its lower portion is provided with openings 45a adapted to receive screws 45b by which the member 45 is secured to the lower portion of the frame member 26. To provide clearance for other parts of the assembly, the upwardly extending arms 45d of member 45 are bent outwardly and then upwardly into a different vertical plane from that of the lower portion of the member.

The frame member 26 is provided with outwardly extending portions 46 and 47 at opposite sides of the passage 39. These extensions are so spaced as to receive, for sliding movement, a slide block 48 having a square or rectangular contour. This slide block is mounted upon a sleeve 49 which has a press fit within an opening through a pitman 50, adjacent the lower end of the latter. The sleeve 49 is provided with horizontally extending wings 51 and 52 (FIGS. 7, 8 and 11) which are adapted to slide vertically between the inner surface of the arms 45d of bracket 45 and the outer surfaces of the projections 46 and 47 of the frame member 26. As will be later explained, the pitman 50 is given vertical, reciprocating movements by suitable connections from the main drive shaft 14. Within the sleeve 49 there is slidably mounted a pin 53, the outer end of which is of reduced diameter and the main portion of which is of larger diameter, as indicated at 53a in FIG. 11. A flat spring 54, secured to the pitman 50, has its lower end forked to straddle the reduced diameter portion of the pin 53,

with the legs of the fork being urged into engagement with the outer surface 53b of the increased diameter portion of pin 53. This general relationship is shown in FIGS. 2 and 11. The arrangement is such that the spring 54 normally urges the pin 53 inwardly toward the trimmer bar 40. The latter has a notch 40a in the edge facing the pin 53, into which the latter is forced by the spring when the notch is brought into alignment with the pin, in the manner to be explained.

To the lower end of the trimmer bar is adjustably connected an L-shaped bracket 55, shown in detail in FIG. 6. This has horizontally elongated openings 55a in its upper arm adapted to receive screws 56 (FIG. 5) having screw threaded engagement with openings 57 in a horizontally extending portion at the lower end of the bar 40. The downwardly extending arm of the bracket 55 is provided with a plurality of screw threaded openings 55b adapted to receive the stems of screws 58 which serve to attach a cutter blade 59 to the bracket. As will be seen in FIG. 6, there are four openings 55b so that two screws 58 may be engaged with any two adjacent openings of this group. In this way the height of the cutter blade in relation to the bracket 55, and hence the bar 40, may be varied. Additional vertical adjustment is made possible by the elongated U-shaped opening in the upper portion of blade 59 (FIG. 21). Also the lateral position of the cutter blade may be varied by virtue of the elongated openings 55a cooperating with screws 56. To the right hand face (FIGS. 4 and 5) of the bracket 55 there is secured a finger piece 60. This may be attached to the bracket by a screw 61. The finger piece 60, upon depression by a finger of the right hand of the operator, will serve to lower the bar from the position shown in FIG. 5 into the position shown in FIG. 4. This will be done at a time when the machine is at rest. When the bar 40 reaches the position of FIG. 4, the pin 53 will be urged toward the right by the spring 54 to engage the end of the pin with the notch 40a in the bar 40. This serves to place the cutter into operative condition so that edge trimming of the work will take place upon the operation of the machine.

The reciprocatory cutter blade, having the configuration shown in FIG. 21, is adapted to cooperate with a stationary cutting blade or edge carried by the throat plate of the machine. The throat plate may be of the same general character as that disclosed in the patent to Reimer et al., No. 2,538,271. As shown in FIG. 17 of the present drawings it comprises a main plate 62 having a detachable insert 63, the form of which is shown in plan and elevation in FIGS. 18 and 19, respectively. It provides a fixed cutting edge 63a with which the cutting edge 59a of the movable blade 59 cooperates in trimming the edge of the work. The insert 63 may readily be removed and replaced by another insert whenever it is desired to change the relationship between the vertically movable trimmer blade and the needle of the sewing machine. Thus the lateral distance between the line of stitching and the trimmed edge of the work may be varied to a certain extent when desired. An adjustable slide member 64, which is also secured to the throat plate 62, serves to cooperate with the downward extension 59b of the movable blade to hold the latter against the fixed cutting edge in the course of the trimming operation.

To retain the upper end of the trimmer bar 40 in its proper path of vertical movement, the frame member 26 is provided with an upward extension 26a having at its upper end a block like portion providing surfaces 65 and 66 (FIGS. 3 and 12) along which one face and one edge, respectively, of the trimmer bar is adapted to slide. The bar is retained in sliding engagement with the surfaces mentioned by means of an L-shaped member 67 secured by a screw 68 to the upper end of extension 26a. As best shown in FIG. 10, the member 67 has its long arm in sliding engagement with the forward edge of the

trimmer bar and has its shorter arm 67a in engagement with the face of the trimmer bar 40 opposite to that which engages the surface 65.

Whenever it is desired to disconnect the trimmer bar from the driving pitman 50, the operator is simply required to press inwardly a pin 69 which may be readily engaged by a finger of the right hand of the operator. The pin 69 is mounted for limited sliding movement in an opening provided in the lower end of the head 13 of the main frame of the machine. It is located in substantially vertical alinement with the finger piece 60 and only a short distance above the latter. A spring 70 having its outer end engaged with the inner face of an enlarged head on the pin 69, and having its inner end engaged with a surface within a small recess in the head 13 of the main frame, serves to urge the pin toward the right (FIG. 5) into an inactive position. The extent of such movement toward the right is limited by an enlarged portion 69a, at an intermediate point along the pin, which engages a surface adjacent the lower end of the head 13. The left end of the pin 69 is preferably forked to provide two branches 69b and 69c, as best shown in FIG. 16. These branches of the pin are arranged for sliding movement along opposite faces of the trimmer bar 40. Pin 69 is so positioned that a portion of its inner end is always in alinement with a portion of the pin 53 which serves to connect the pitman 50 with the trimmer bar. Accordingly as the pin 69 is urged inwardly by the operator, its inner end will engage the pin 53 and force this out of the recess 40a in the trimmer bar, against the action of the spring 54. When the pin 53 is completely disengaged from the trimmer bar the latter will be drawn upwardly by the action of the torsion spring 42 to a position in which the recess 40a will not become alined with the pin 53 during the operation of the machine. In this way, the edge trimming mechanism will be rendered inoperative until the trimmer bar is again depressed by the manual engagement of the finger piece 60. Both the finger piece 60 and the pin 69 will preferably be operated to accomplish their purposes only when the sewing machine is at rest.

The connections for driving the pitman 50 from the main shaft 14 will now be described. These connections are best shown in FIGS. 1, 2 and 9. They include an eccentric 71 having an extension 71a in the form of a collar that is secured to the shaft 14 by means of screws 71b. Cooperating with the eccentric is the strap portion 72 of a pitman having an arm 72a. A needle bearing unit 73 is preferably provided between the strap 72 and the outer surface of the eccentric. At the opposite side of the strap 72 from that at which the collar 71a is provided, there is secured to the shaft 14 a counterweight 74. The latter is secured to the shaft by means of screws 74a. Two purposes are served by this counterweight. It assists in retaining the strap 72 in proper position on the eccentric and it counterbalances the extra weight of that portion of the eccentric and related parts which are at a greater distance from the axis of shaft 14 than are other parts of the unit.

The upper end of arm 72a of the pitman is connected by a bolt 75 to an arm 76 having a split clamping portion 77 that is secured, by the tightening of a screw 77a to the end of a shaft 78. This shaft is journaled in suitable bearings 79a and 79b provided in a wall of the overhanging arm which separates the main portion of the latter from the head portion. Within the head there is secured to the shaft 78 a collar 80 which, in combination with the clamping portion of arm 76, serves to retain the shaft 78 against any significant axial movement. Through the connections described, it will be clear that the shaft 78 is oscillated in response to the rotation of the shaft 14. At the outer end of the shaft 78, within the head 13 of the main frame, there is secured, in any suitable way, an arm 81 (FIGS. 1 and 2). The latter will be oscillated through the same arc as the shaft 78. At its outer end the arm 81

7

is connected by a screw or bolt 82 to the upper end of the pitman 50. The screw or bolt, for this purpose, has a cylindrical portion cooperating with a bearing sleeve 50a (FIG. 7) fitted within an opening through a bent over portion of the pitman 50. The foregoing arrangement is such that the pitman 50 will be reciprocated in a substantially vertical direction upon each revolution of the shaft 14. It will, however, be given a slight rocking movement about the axis of sleeve 49.

It will be seen from the foregoing that applicant has provided a very compact, completely enclosed, and quite simple form of connections from the main drive shaft 14 to the trimmer bar for reciprocating the latter. The arrangement is such, moreover, that the tendency toward production of objectionable vibrations in the high speed operation of the machine, as a result of the reciprocation of the trimmer bar has been reduced to a minimum. In addition, the means for putting the trimming mechanism into operation and for throwing it out of operation are very conveniently located for manual operation by the operator of the machine.

Provisions of the general character shown in the Covert Patent No. 2,977,910 are preferably included in the structure to bring about effective lubrication of all of the major surfaces requiring lubrication. A slight rearrangement of certain of the parts shown in the Covert patent will be required for this purpose to avoid interference with the pitman 72a for example. Thus the bushing 90 shown in the Covert patent would need to be moved slightly toward the front of the overhanging arm. Also provision should be made for the delivery of lubricant through a passage, similar to that shown at 93 in the Covert patent, to the needle bearing 73 of the present construction. Furthermore, within the head of the present frame structure provision is made for the lubrication of the block 48 and related parts which are subject to reciprocation within certain confining surfaces. For this purpose the pitman 50, as best shown in FIG. 7, is provided with a recess 50b extending longitudinally of the pitman throughout the greater portion of its length. This recess, which reduces the weight of the pitman 50, is adapted to receive a wick which is supplied with lubricant in the general manner disclosed in the Covert patent, and which then serves to deliver the lubricant to the indicated surfaces. The upper end of the wick is preferably wrapped around the bent over extension at the top of the pitman 50, where it is readily accessible for the delivery of lubricant thereto. It will be understood that the head of the main frame of the machine is closed by a cover of the general type shown in the above-mentioned Covert patent. It will, however, be of somewhat greater horizontal dimension to provide adequate clearance for the parts enclosed within it. The cover member is of course secured to the head by screws suitably located to avoid interference with moving parts. A portion of the cover member will cooperate directly with portions of the frame member 25 which replaces a cut-out portion of the main head casting. The overhanging arm of the main frame is provided with a hinged cover 83 (FIG. 9), which is retained in closed position by a spring latch element 84, to facilitate access to the eccentric 71 and related parts.

While a preferred embodiment of the invention has been shown and described in detail, various modifications of the construction disclosed herein may be made within the scope of the appended claims.

What is claimed is:

1. In a sewing machine having a frame provided with a work supporting base and an overhanging arm, a rotary drive shaft extending longitudinally of said arm, a reciprocating needle carried by said arm, complementary stitch forming means in said base cooperating with said needle to form stitches, and work feeding devices for advancing work to be stitched, the combination which comprises a unit having a frame removably connected with said arm

8

at the outer end thereof, a plurality of reciprocating bars mounted in said frame of the unit, said needle being connected with the lower end of one of said bars, a trimmer blade connected with the lower end of another of said bars, spring means normally urging said last mentioned bar upwardly, connections from said drive shaft to said bars for reciprocating the same, and manually engageable means above said trimmer blade and closely adjacent thereto and to said bar which carries the trimmer blade, but slightly to the right thereof, readily operable at the will of the operator for engaging and disengaging said connections to said bar which carries the trimmer blade.

2. In a sewing machine of the character set forth in claim 1, a presser foot carried by still another of the bars mounted in the frame of said unit, said presser foot cooperating with said work feeding devices in the advance of the work being stitched.

3. In a sewing machine of the character set forth in claim 1, said spring means comprising a torsion spring.

4. In a sewing machine of the character set forth in claim 1, said connections to said bar which carries the trimmer blade comprising a vertically movable pitman, a spring urged pin carried by said pitman, said trimmer blade carrying bar having a notch therein into which the end of said pin is urged when the pin and notch are aligned, said manually engageable means operable by the operator comprising a member adapted to depress said blade carrying bar in opposition to said spring means, a pin carried by said overhanging arm in substantial alignment with said first mentioned pin, a spring normally urging said second mentioned pin away from said first mentioned pin, and means accessible to the operator for pushing said second mentioned pin against the action of said spring into engagement with said first mentioned pin to disengage the latter from said notch.

5. In a sewing machine of the character set forth in claim 4, said second mentioned pin being forked to straddle said trimmer blade carrying bar.

6. In a sewing machine having a main drive shaft, stitch forming mechanism, edge trimming mechanism, work feeding mechanism and connections from said drive shaft for operating said mechanisms in timed relation, said edge trimming mechanism comprising a bodily reciprocating cutter blade, a torsion spring for urging said cutter blade into an inactive position, and means readily accessible to the operator of the machine for connecting said trimming mechanism with said drive shaft and for disconnecting the same from said drive shaft, said last mentioned means comprising a plurality of substantially aligned spring-urged pins, one of said pins being spring-urged to connect said trimming mechanism with said drive shaft and the other of said pins being manually operable to engage said one of said pins to shift the latter and thereby disconnect said trimming mechanism from said drive shaft.

7. In a sewing machine of the character set forth in claim 6, the connections from said drive shaft to the trimming mechanism comprising a longitudinally reciprocating pitman, said one of said pins being carried by said pitman to connect the latter to said trimming mechanism, and said other of said pins being substantially aligned with said one of said pins and being accessible for operation to shift said first mentioned pin to disconnect said pitman from said trimming mechanism.

8. In a sewing machine of the character set forth in claim 7, a vertically reciprocating bar to which said cutter blade is secured, said second pin being forked to straddle said bar.

9. In a sewing machine having a main drive shaft, stitch forming mechanism, edge trimming mechanism, work feeding mechanism, and connections from said shaft for operating said mechanisms in timed relation, said edge trimming mechanism comprising a member reciprocating bodily in a vertical direction, and means closely adjacent to the path of movement of said edge trimming mecha-

9

nism at the right side thereof readily engageable by the right hand of the operator for connecting said edge trimming member with said drive shaft and for disconnecting the member from said drive shaft.

10. In a sewing machine of the character set forth in claim 9, said last mentioned means comprising a manually engageable member connected with said reciprocatory member of the trimming mechanism and a push button having its longitudinal axis disposed in substantially the same vertical plane as said manually engageable member.

10

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10 JORDAN FRANKLIN, *Primary Examiner*.