June 8, 1926. 1,587,957

G. HÜBER

MACHINE FOR SEWING TOGETHER AND COVERING THE EDGES OF KNITTED OR WOVEN FABRICS.

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Fig.3

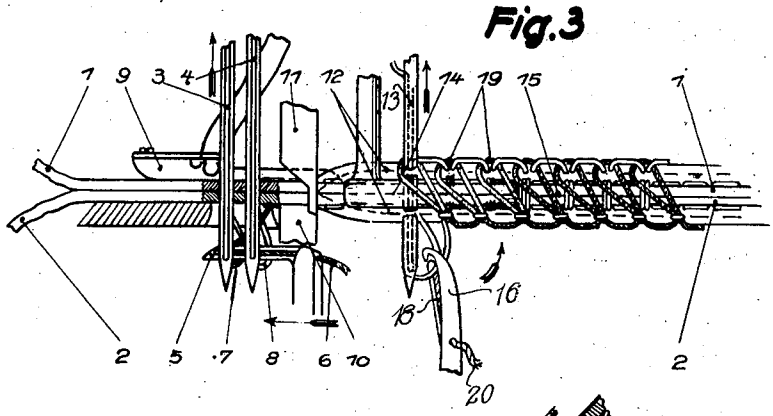


Fig.4

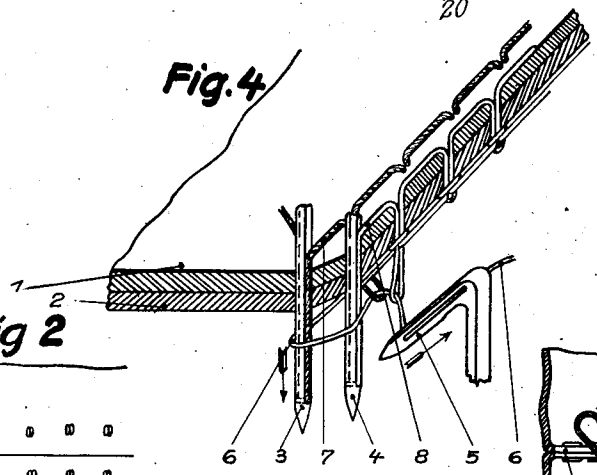


Fig 2

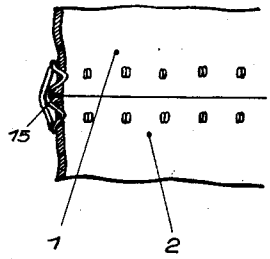


Fig.1

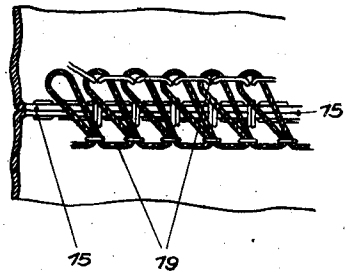
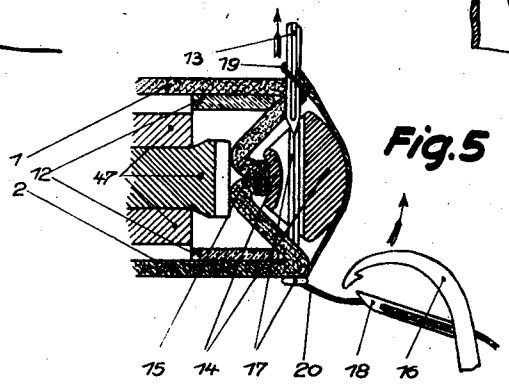


Fig.5



Inventor
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Fig. 6

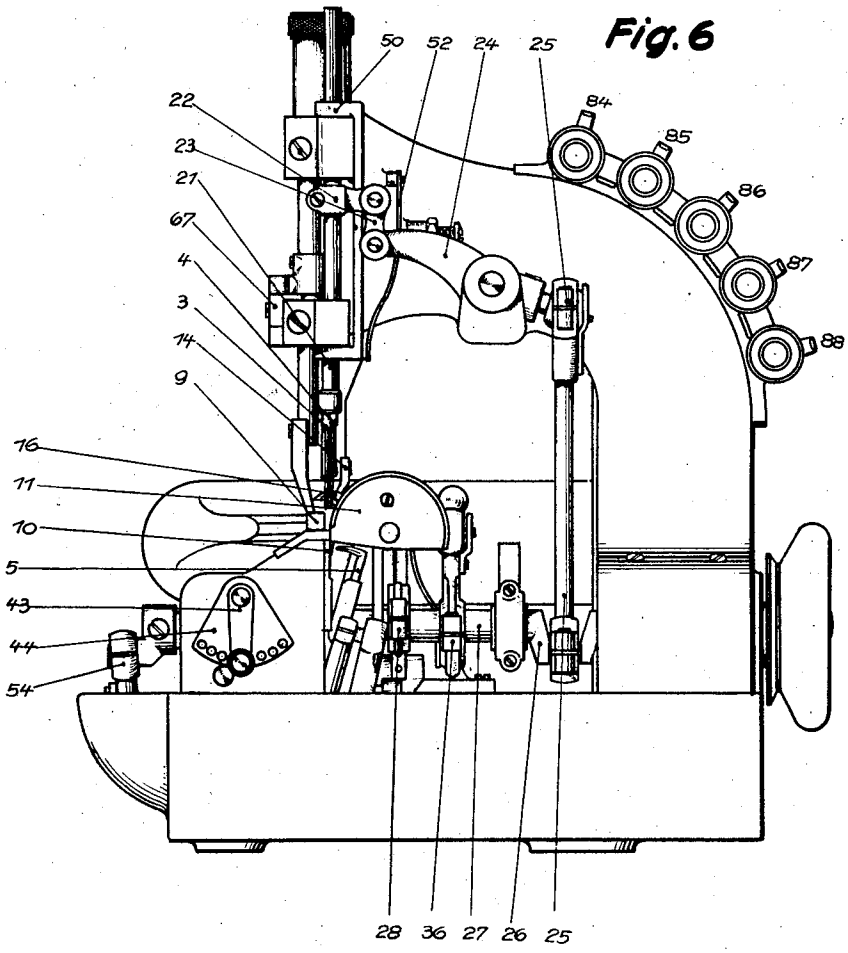


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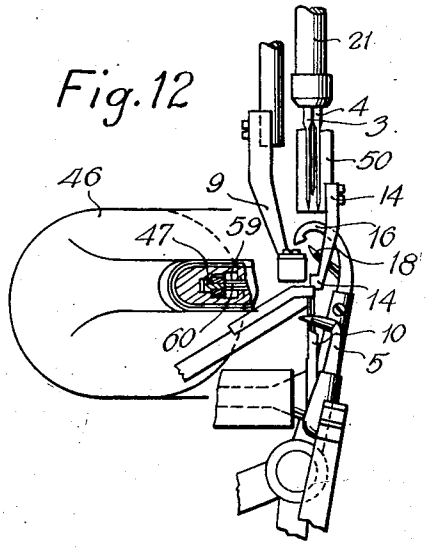
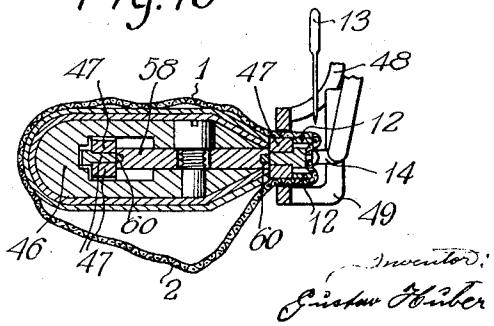


Fig. 13



Inventor:
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Fig. 10

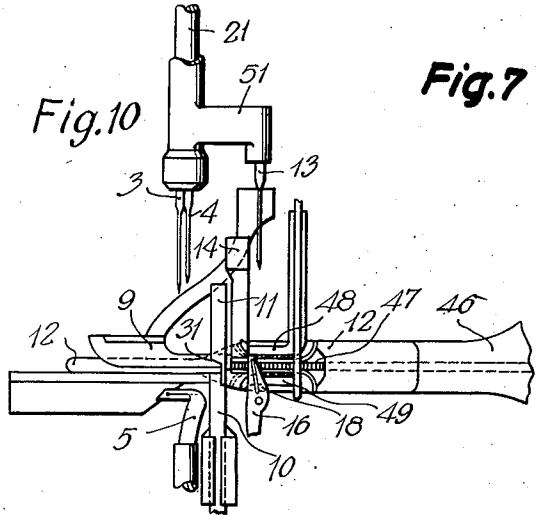
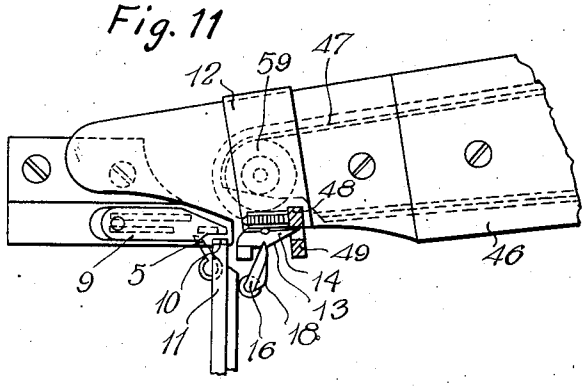


Fig. 7

Fig. 11



Inventor:
Gustav Hüber

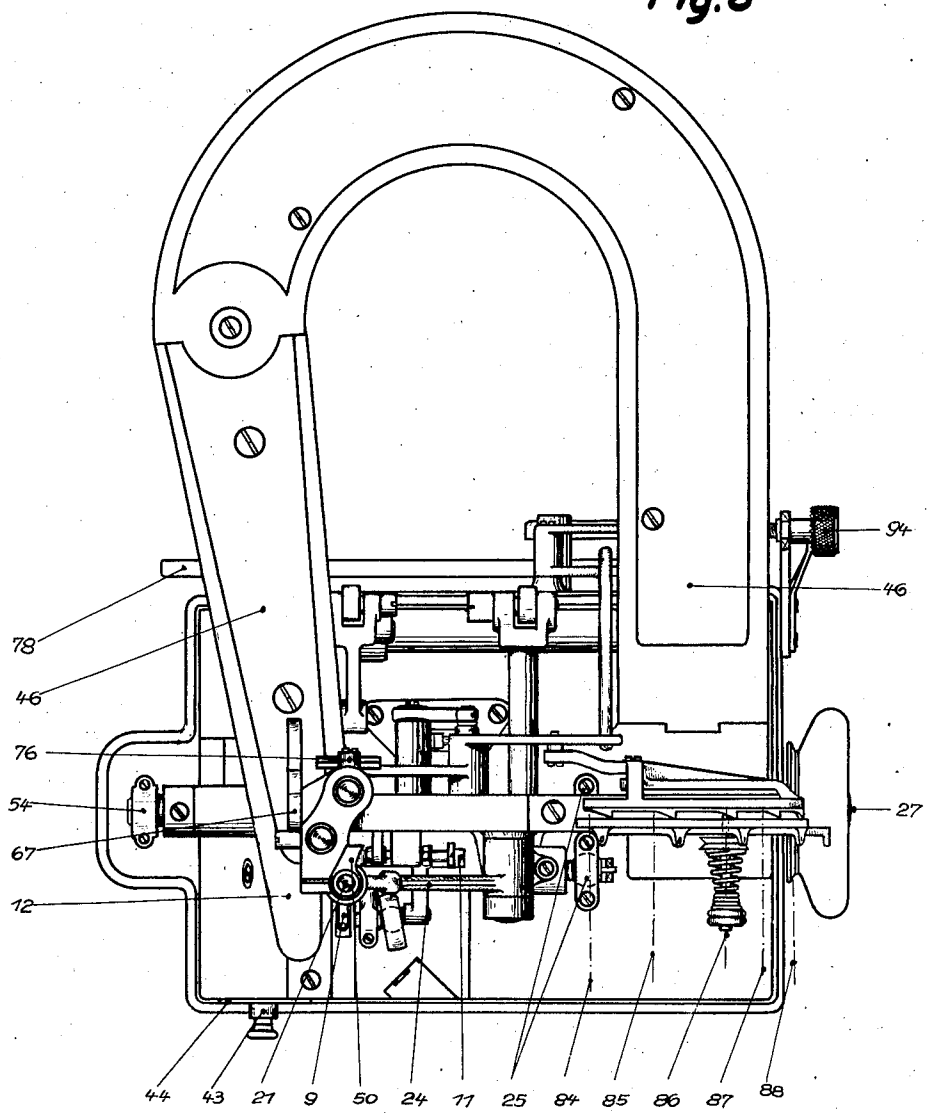
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MACHINE FOR SEWING TOGETHER AND COVERING THE EDGES OF KNITTED OR WOVEN FABRICS

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Fig. 8



Inventor:
Gustav Hüber

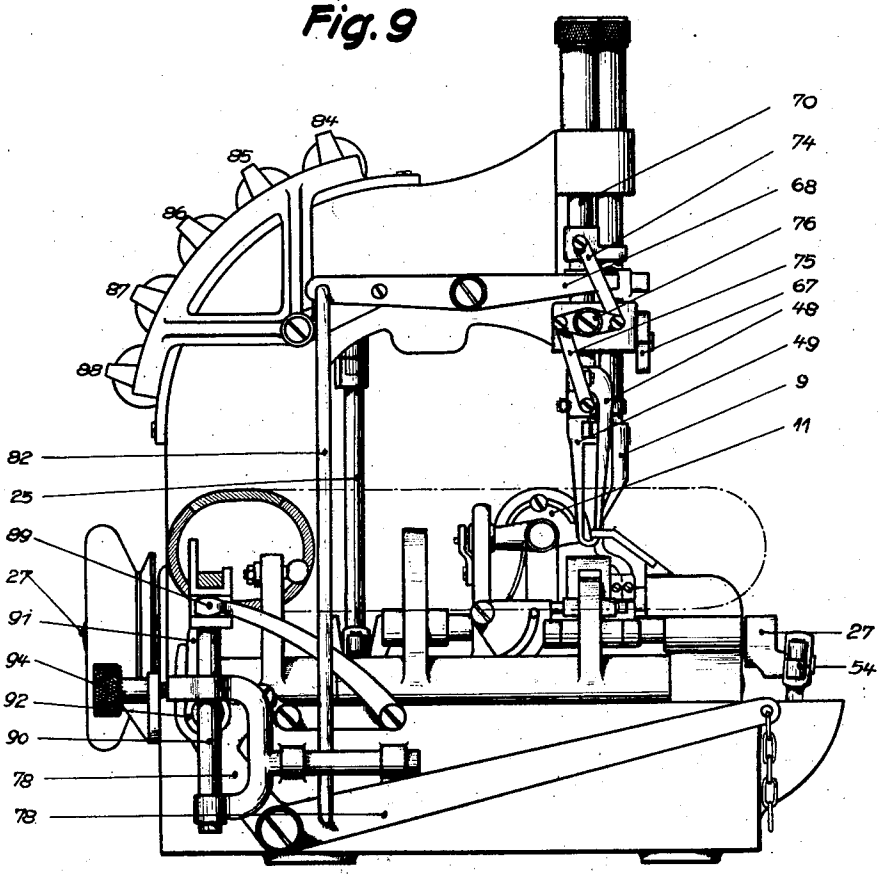
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Fig. 9



Inventor:

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Fig. 14

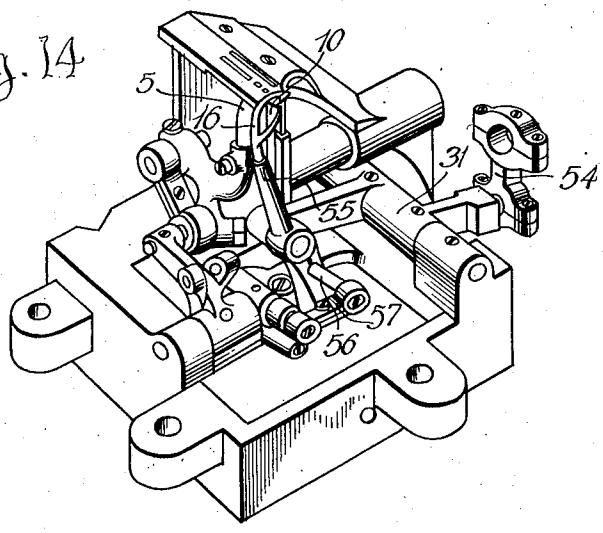


Fig. 15

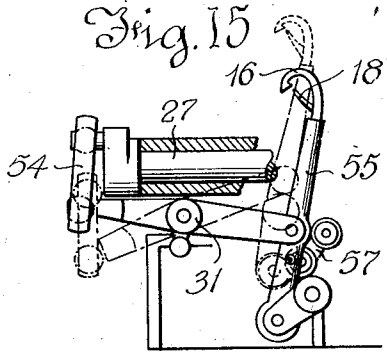
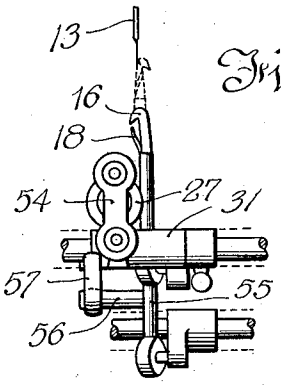


Fig 16



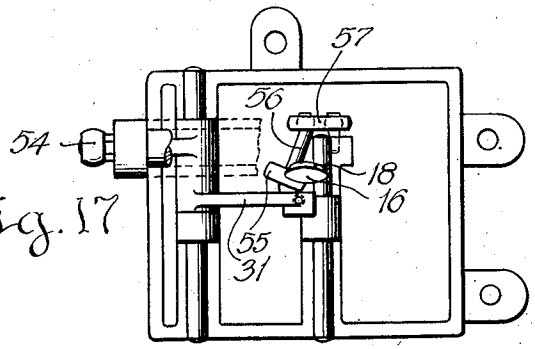


Fig. 17

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H. G. Bernhard
Attorney

June 8, 1926. 1,587,957

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Fig. 18

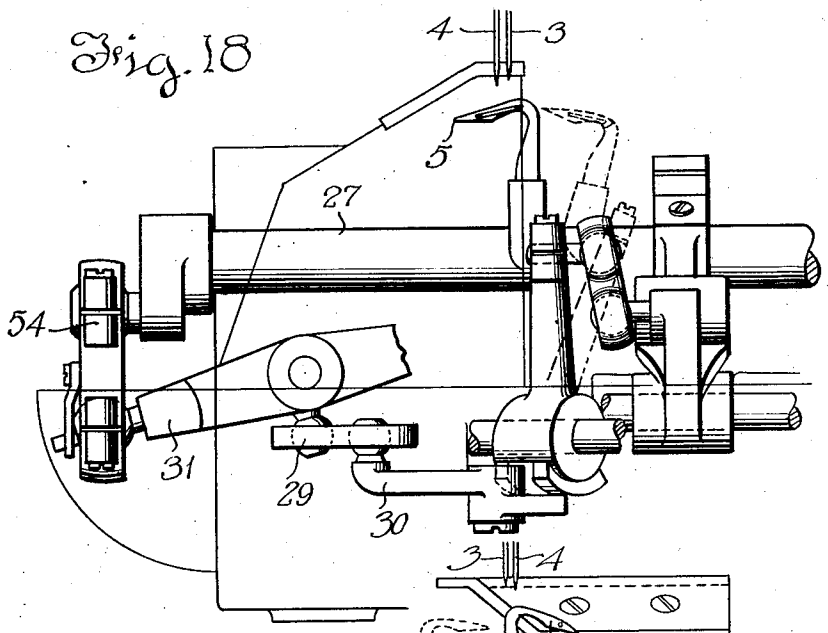


Fig. 19

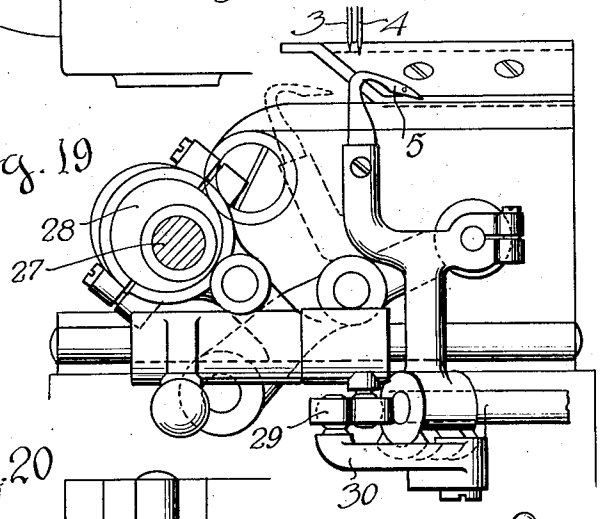
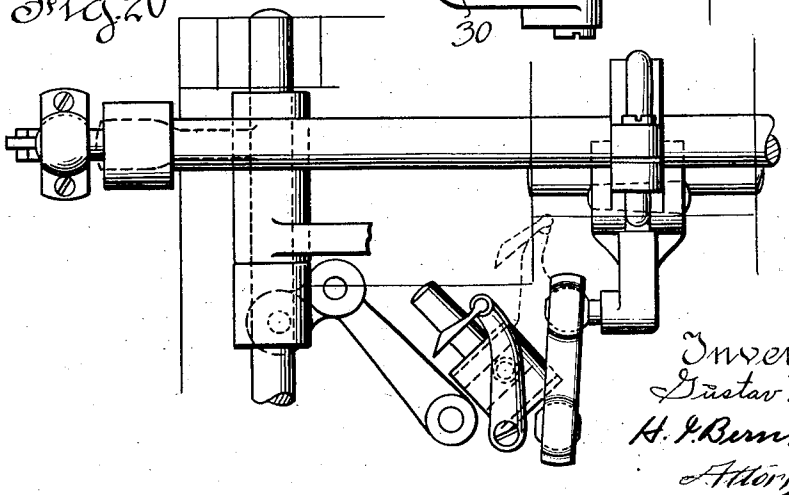


Fig. 20



Inventor
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June 8, 1926. 1,587,957

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Fig.21

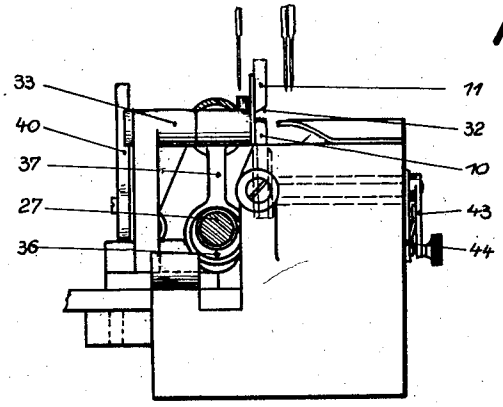


Fig.22

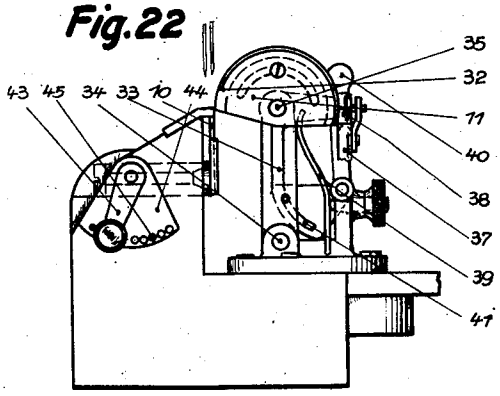


Fig.24

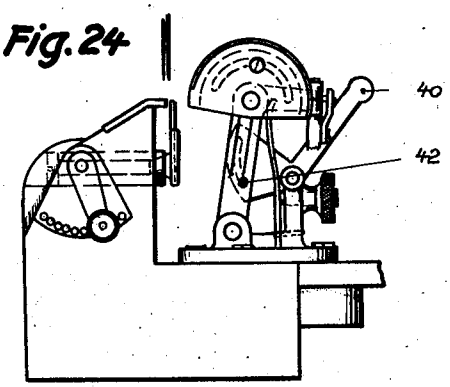
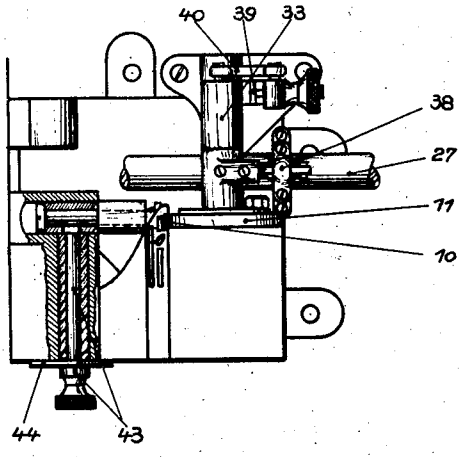


Fig.23



Inventor:
Gustav Hüber

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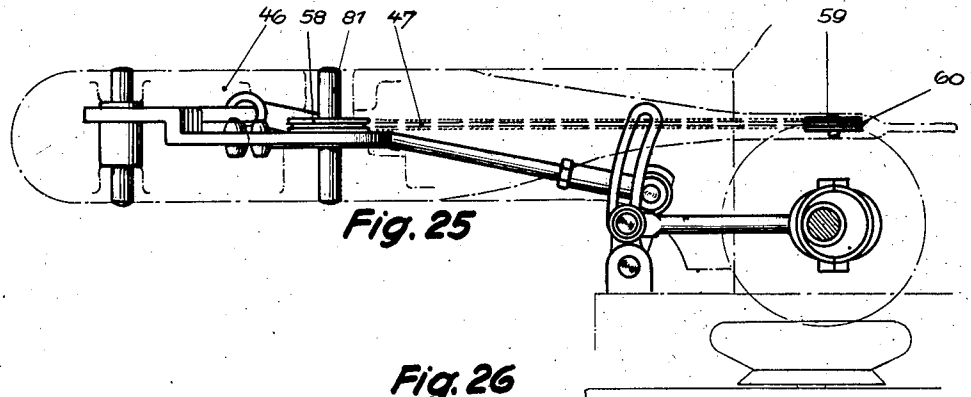


Fig. 25

Fig. 26

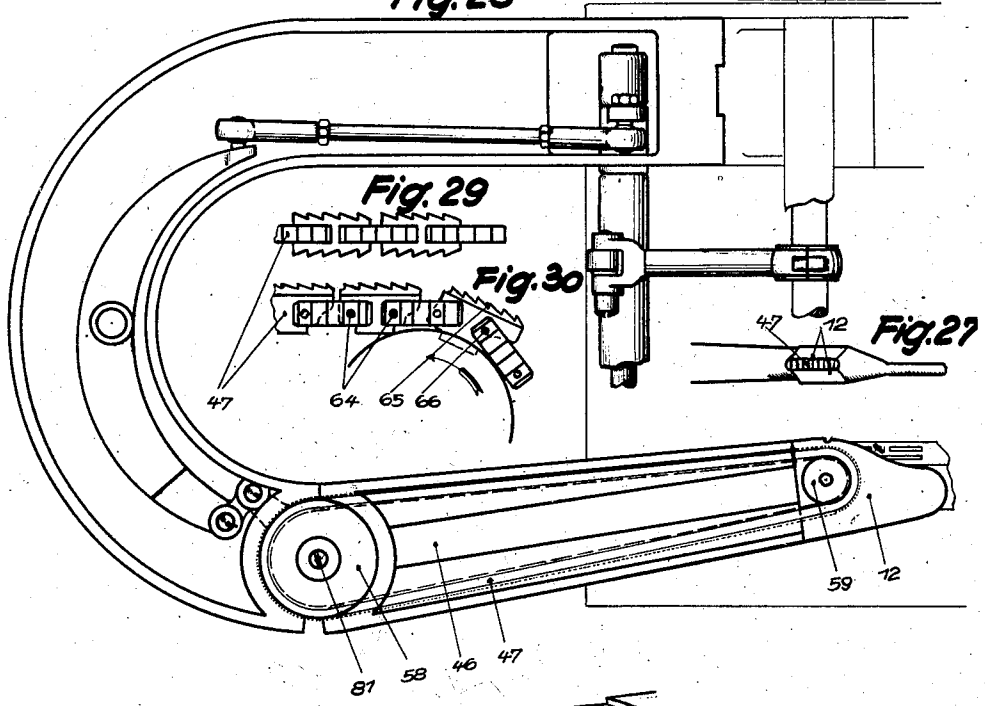


Fig. 29

Fig. 30

Fig. 27

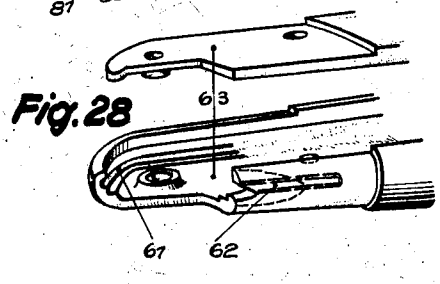


Fig. 28

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Fig. 31

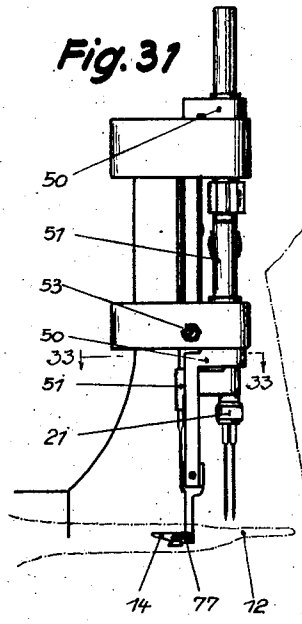


Fig. 33

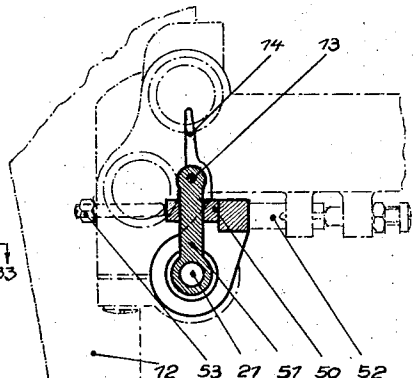


Fig. 32

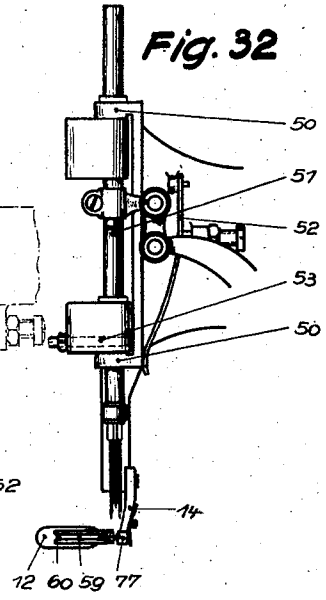


Fig. 34

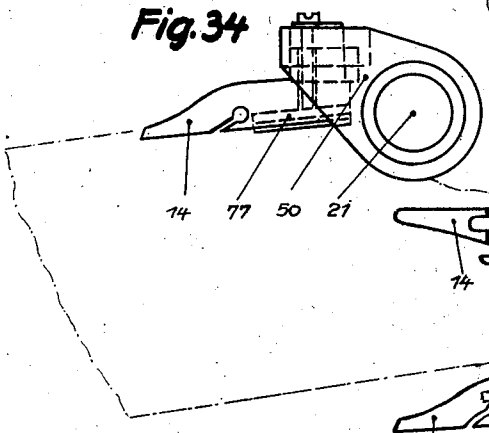


Fig. 35

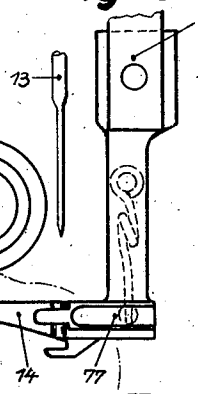


Fig. 37

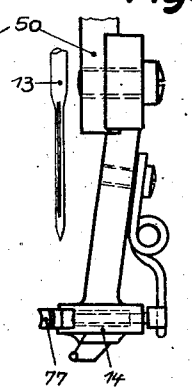


Fig. 38

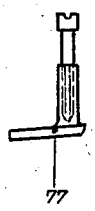
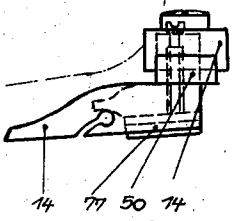


Fig. 36



Inventor:
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Fig. 39

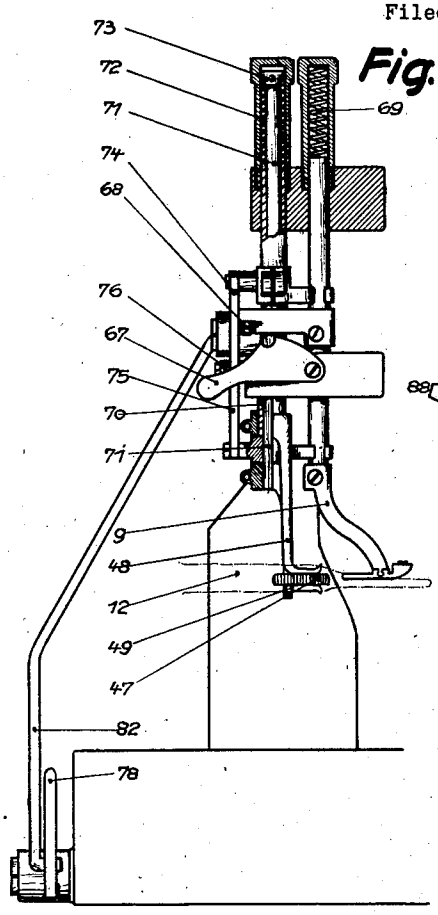


Fig. 40

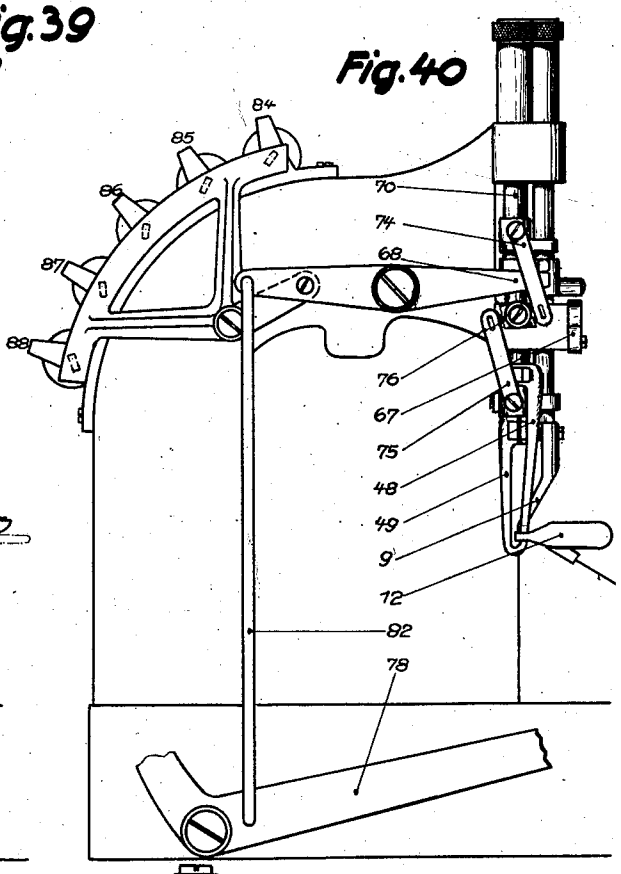
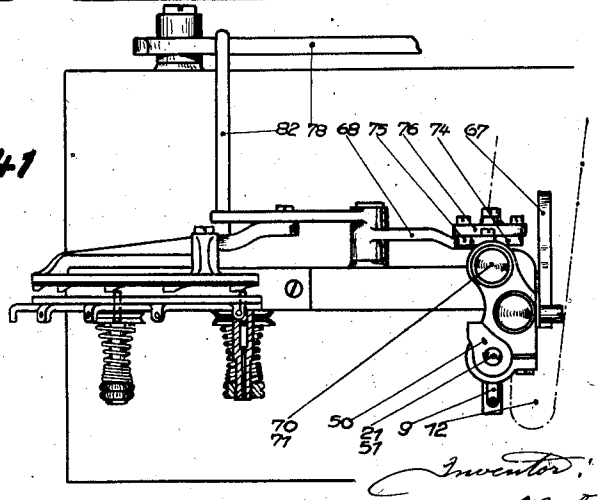


Fig. 41



Inventor:
Gustav Hüber

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Fig. 42

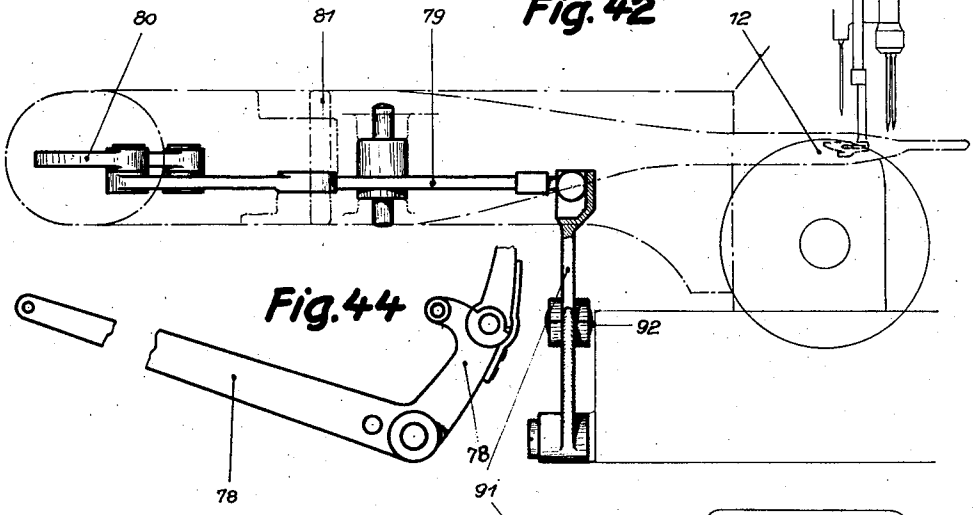
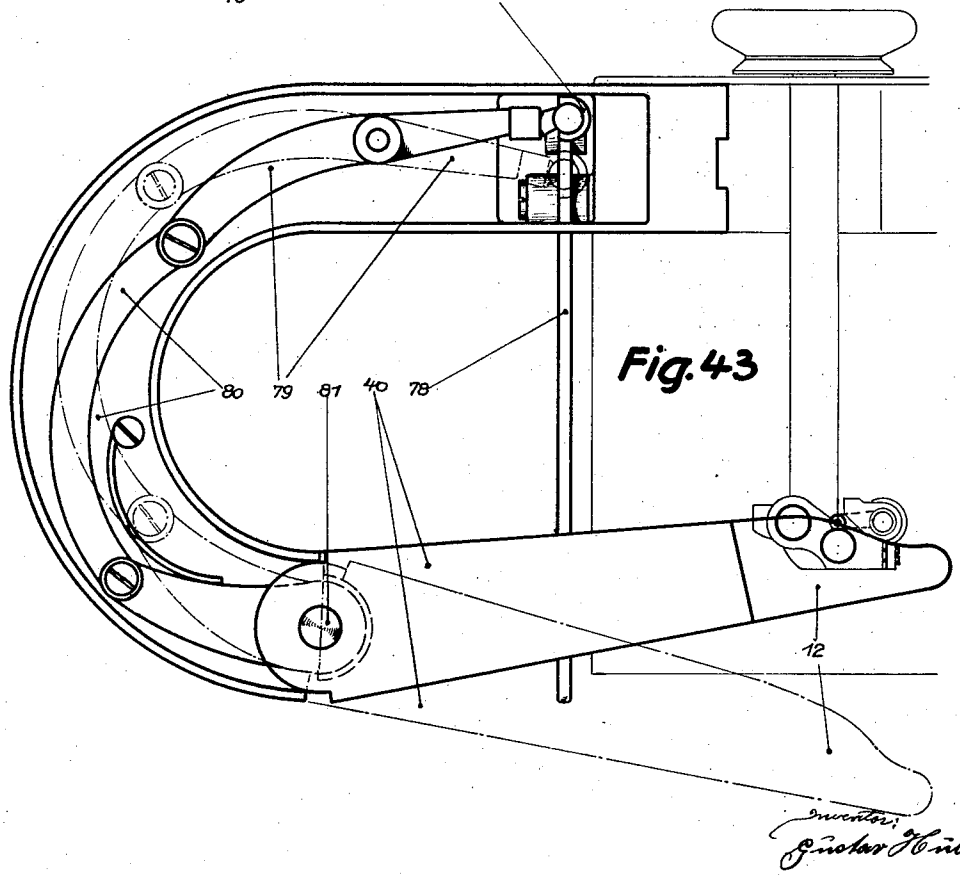


Fig. 44

Fig. 43



Inventor:
Gustav Hüber

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Fig. 45

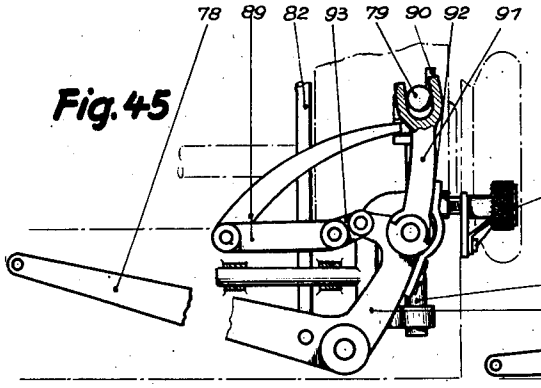


Fig. 46

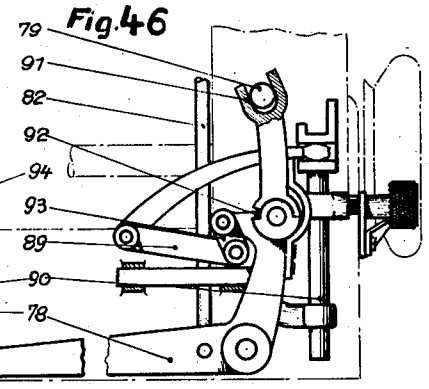


Fig. 47

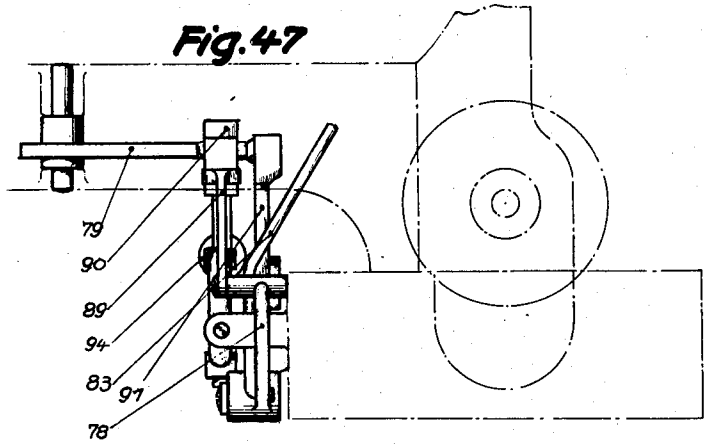
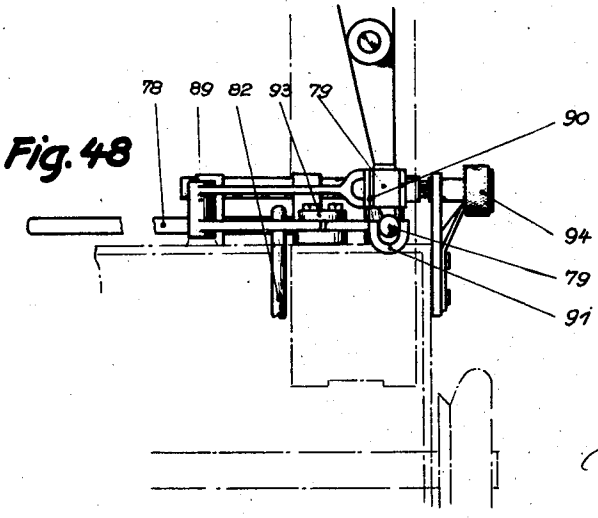


Fig. 48



Inventor:
Gustav Hüber

Patented June 8, 1926. 1,587,957

UNITED STATES PATENT OFFICE.

GÜSTAV HÜBER, OF STUTTGART, GERMANY.

MACHINE FOR SEWING TOGETHER AND COVERING THE EDGES OF KNITTED OR WOVEN FABRICS.

Application filed August 25, 1920, Serial No. 405,927, and in Germany April 9, 1920.

My invention relates to sewing machines and more particularly to sewing machines for producing an overseam to cover a previously made seam for uniting two pieces of fabric. To this end, my new sewing machine comprises two separate sewing mechanisms, one for uniting two pieces of fabric by an ordinary seam and the other for producing the overseam, the arrangement being such that the ordinary seam and the overseam are produced in one operation. Each sewing mechanism is equipped with a separate feed device and separate presser-feet.

The sewing mechanism for uniting the fabrics comprises two closely positioned needles carried by one needle bar but offset relative to each other and both cooperating with a common looper.

The overseam mechanism consists of a needle cooperating with a looper, the latter in addition to the up- and downward movement having also a lateral movement toward and away from the overseam needle. With the overseam needle cooperate also two opposed presser feet and a feed device consisting of a conveyor chain, the arrangement being such that the feed is accomplished on three sides simultaneously.

The conveyor-chain is provided in a curved arm of the overseam mechanism, the outer end of which arm, by a special lever device, can be swung out to permit the removal of tubular work from said arm. The extreme end of this arm is shaped so as to act as a spreader to spread the united pieces of fabric to permit the overseam needle to stitch through the pieces on both sides of the uniting seam so as to cover the same over. The overseam needle is provided in a holder movable on the needle bar and guided by a rocking frame.

Between the needles for uniting the pieces of fabric and the overseam needle is provided a trimming device for trimming off the united edges. Said trimming device comprises an exchangeable stationary flat lower knife and a pivoted sector-shaped upper knife.

Other features of my new sewing machine will appear from the following detailed description with reference to the accompanying drawing, in which Fig. 1 shows the compound seam as seen from the back, Fig. 2 shows the seam from the front and a cross-section through the pieces of fabric sewed together; Fig. 3 illustrates, on an enlarged scale, the two sewing operations; Fig. 4 shows in perspective the sewing together; Fig. 5 illustrates the stitching of the two pieces of goods by the overseam needle; Fig. 6 is a front view of the entire machine; Fig. 7 a side view thereof showing the curved arm; Fig. 8 a top plan view; Fig. 9 a rear view with the curved arm cut off; Fig. 10 is a partial side view of the cooperating needles; Fig. 11 a partial top plan view thereof; Fig. 12 a partial front view with the portion of the curved arm removed; Fig. 13 is an enlarged section through the arrangement of the feed mechanism at the forward end of the curved arm; Fig. 14 is a perspective view showing the two loopers and the lower trimming knife; Figs. 15, 16 and 17 illustrate the movements of the overseam looper respectively in front, side and top plan view; Figs. 18, 19 and 20 show the looper for the sewing needles in two different portions respectively in front, side and top plan view; Figs. 21, 22 and 23 show the trimming device respectively in side, front and top plan view; Fig. 24 shows the upper trimming knife when swung out of operative position; Figs. 25, 26, 27, 28, 29 and 30 illustrate the feed mechanism mounted in the curved arm, Fig. 25 being a side view thereof, Fig. 26 a top plan view, Fig. 27 a view from the inner side of the extreme end of the arm, Fig. 28 showing the extreme portion in perspective with the cover raised, Fig. 29 being a partial side view of the feed mechanism on an enlarged scale and Fig. 30 a top plan view, Figs. 31–38 are various views of the ledge provided in the forward end of the arm, Fig. 31 being a partial side view of the machine, Fig. 32 a partial front view, Fig. 33 a horizontal section through the holder for the overseam needle and rocking frame, Fig. 34 a partial top plan view of the ledge shaft on an enlarged scale; Fig. 35 a partial side view of the ledge shaft and the ledge, Fig. 36 a top plan view of Fig. 35; Fig. 37 a front view of Fig. 35; and Fig. 38 a partial view of a yieldingly mounted tongue. Figs. 39, 40 and 41 illustrate the yielding arrangement

of the various presser-feet and the manner of release of the spring tension by the actuating lever of the pivoted arm, Fig. 39 being a partial side view of the machine, Fig. 40 a partial rear view thereof broken away to show slotted pivoting of the rods controlling the presser feet and Fig. 41 a top plan view of the corresponding portion of the machine, one of the springs being shown in section. Figs. 42, 43 and 44 illustrate the manner of swinging out the curved arm, Fig. 42 being a partial side view of the machine and Fig. 43 a partial top plan view thereof, while Fig. 44 shows the actuating lever. Figs. 45, 46, 47 and 48 show the locking means for the curved arm to prevent the same from swinging out while the machine runs at high speed, Figs. 45 and 46 being partial front views of the machine, Fig. 47 a partial side view thereof and Fig. 48 a partial top plan view.

As illustrated by Figs. 1 to 5, the two pieces of fabric 1 and 2 are first sewed together in a well-known manner by the needles 3 and 4 which cooperate with the common looper 5. The needles 3 and 4 are close together, but are offset relative to each other in the path of travel of the pieces of fabric 1 and 2. Fig. 3 shows the position when the advancing looper 5 with its thread 6 engages the two loops 7 and 8 of the ascending needles 3 and 4 in order to throw off said loops, after the ascent of the needles 3 and 4, onto its own thread 6. The sewed together pieces 1 and 2 which are held together by the presser-foot 9 and are advanced by the feed-mechanism are then trimmed off by the trimming device comprising the stationary lower knife 10 and the movable upper knife 11, the two pieces 1 and 2 while being advanced moving below and above a spreader 12 which prepares the two pieces 1 and 2 for the overseam needle 13 to pass through.

A ledge 14 is provided to press the seam 15 against the feed-mechanism which is disposed in the spreader 12, whereby the pieces of fabric 1, 2 are bent over on both sides of the seam 15 in such a way that edges are formed through which the overseam needle 13 makes its stitch (Fig. 5). The overseam needle cooperates with the looper 16. Fig. 3 shows the position, in which the looper 16 has engaged the loop 17 of needle 13. The loop 17 is then held on the finger 18 of the looper 16, until needle 13 has engaged the loop 19 of the looper-thread 20 above the piece 1.

Now I shall describe in detail the construction of my new sewing machine. The sewing mechanism essentially comprises the two needles 3 and 4, the presser-foot 9 with the usual stitching plate and the feed device. The two needles 3 and 4 are arranged side by side in one needle-bar 21 (Figs. 6, 7 and 8) in well-known manner, which receives its movement by means of the link 22, link 23, lever 24, crank-rod 25 and crank 26, from the main shaft 27 of the machine (Fig. 6).

The needles 3 and 4 cooperate with the looper 5, which in well-known manner, is operated by a cam 28 (Fig. 19) by means of a back-lash link. The looper receives its transverse movement by means of a link 29 and a bell-crank lever 30 (Figs. 18–20) from the lever 31 also used for the overseam looper 16.

After having been sewed together by the needles 3 and 4, the two pieces 1 and 2 pass the trimming device (Figs. 21–24). The latter comprises the stationary lower knife 10 and the movable upper knife 11. The lower knife 10 has the usual flat shape and is mounted in a removable bearing block (Fig. 24), which also carries the looper mechanisms for the needles 3 and 4 and the overseam needle 13. The upper knife 11 has the shape of a sector and is mounted to oscillate about a central axis. The cutting edge is provided at the circumference of the sector, and as the upper knife 11 is rocked up and down it cooperates with the cutting edge of the lower knife 10. The upper knife 11 is mounted on an arm 33 adapted to oscillate about an axis 34, and obtains its rocking motion about its own axis 35 from a cam 36, provided on the main shaft 27 (Fig. 21) by means of a rod 37 and ball joint 38. A spring 39 (Fig. 22) exerts a lateral pressure against arm 33 and thereby against the knife 11. Moreover, knife 11 receives a pressure directed against the cutting edge of the lower knife 10 by the drive mechanism 36, 37, 38 which pressure, as the resistance of the cutting edge 32 of the upper knife increases, that is, where thick fabrics, cross-seams and the like are to be trimmed, automatically increases. (The arm 33, upon an increasing cutting resistance receives a greater pressure against the lower knife which results in an increase in the lateral cutting pressure). In this way the cutting pressure automatically adjusts itself for heavy material and unequal thicknesses. Moreover, a coarse adjustment of the cutting pressure can be effected by the adjustment of the spring 39.

With the aid of lever 40 (Fig. 24) which contains a guiding groove 41 into which enters a pin 42 projecting from arm 33, the upper knife 11 can be swung back entirely away from the lower knife 10. In this way, sufficient space is gained for the replacement of the two knives and for threading the needles. The separation of the upper knife 11 from the lower knife 10 (Fig. 24) also enables the machine to be operated without the trimming device, e. g. for sewing regular edges. With the aid of a lever

ward end of curved arm 46 is swung out, both presser-feet 48 and 49 can be lifted off whereby the overseam is completely released. The two presser-feet 48 and 49 are pressed against each other by a single spring 72 (Fig. 39) and the pressure can be regulated by an adjustable collar 73.

When the presser-foot 9 is lifted off by means of the lever 67, the presser feet 48 and 49 are at the same time removed from the goods through suitable projections by means of links 74 and 75 which are both pivoted to the same lever 76 (Fig. 40). Both presser-feet 48, 49 are independently yielding so as to insure a uniform pressure against the goods where uneven parts occur. The independent resiliency is obtained by slots at the pivotal points of the rods 74 and 75 so that both pressure feet 48 and 49 have some play in their direction of movement (see Fig. 40).

After the pieces of fabric 1, 2 have been sewed together and as they leave the presser-foot 9, they are immediately engaged by the feed-chain 47 and the seam 15 is pressed against the ledge 14 (Figs. 5 and 13). To prevent a premature retraction of ledge 14 and to secure the exact stitching of the edges of the goods by the overseam needle 13, also in cases of uneven portions in the material, there is provided in the forward portion of ledge 14 a resilient member, comprising a spring-controlled part 77 (Figs. 34–38) which moves ledge 14 into the required position for the stitching only when the change in the thickness of the material reaches the height of the overseam needle 13.

Now, if the goods are tubular and, when finished, are successively placed on the curved arm 46 and the latter can not receive any more goods, the forward end of arm 46, as indicated by the broken lines in Fig. 43, can be swung out of its operative position far enough, to enable the finished pieces to be removed. This swinging movement of the arm is effected by a lever 78, which in turn operates a lever 79. The latter imparts its movement to a link 80 which is secured to the movable portion of arm 46. On the axis 81 of the movable portion of arm 46 there is also mounted the drive roller for the feed chain 47. When the movable arm portion is swung out, the presser feet 9, 48 and 49 are lifted off by means of the rod 82, the lever 68 and a suitable projection on the rod of the presser foot 9 (Figs. 39–41) and all the springs 84, 85, 86, 87, 88 are relieved.

For preventing lateral oscillations of the forward end of arm 46 when the machine is running at high speed the forward portion of the arm 46 is locked by an automatically acting safety device (Figs. 45–48). This safety device comprises a lever 89 which by means of a member 90 locks the lever 79, which is accomplished by the elbow lever 78 which by means of its shorter arm 91 having a joint at 92 and by means of a link provided at the other end of lever 78 actuates lever 79. The said safety position is effected by a connecting piece 93 which acts on lever 89. This action occurs, as the forward end of arm 46 is swung out, before lever 79 is actuated by the elbow lever 78, 91, but as the arm portion 46 is swung in, the action occurs only after lever 79 has reached its end position. The operation of the safety device at the correct moment is effected partly by the link at the end of lever 78 and partly by the play occurring at the pivotal point 92 of the arm 91.

To enable the stitching of the material to be accomplished accurately, in spite of the said safety means, a set screw 94 is provided, by means of which the safety member 89 and 90 as well as lever 79 and thereby arm 46 can be adjusted relative to the overseam needle 13.

I claim as my invention:

1. The combination with a sewing mechanism for uniting two pieces of fabric, of a second sewing mechanism for producing an overseam to cover the uniting seam, the sewing together and the production of the overseam being done in one operation, and a spreader interposed between said two sewing mechanisms so as to bend over the sewed together pieces of fabric on both sides of the uniting seam to enable the needle of said second sewing mechanism to stitch through both the bent edges of the sewed together pieces of fabric on both sides of the uniting seam.

2. The combination with a sewing mechanism for uniting two pieces of fabric, of a second sewing mechanism for producing in the same operation an overseam to cover the uniting seam, a spreader interposed between said two sewing mechanisms so as to bend over the sewed together pieces of fabric on both sides of the uniting seam to enable the needle of said second sewing mechanism to stitch through both the bent edges of the sewed together pieces of fabric on both sides of the uniting seam, and a movable abutment for the uniting seam while passing said spreader.

3. The combination as set forth in claim 2, comprising a spring for constantly moving said abutment into the path of the uniting seam of the pieces of fabric.

4. The combination with a sewing mechanism for uniting two pieces of fabric, of a second sewing mechanism for producing in the same operation an overseam to cover the uniting seam, a spreader interposed between said two sewing mechanisms so as to bend over the sewed together pieces of fabric on both sides of the uniting seam to enable the

43 which can be moved over a disk 44 provided with stops 45 (Fig. 22) the width of the trim of the seam can be regulated at will.

After the trimming of the seam 15, the spreader 12 bends the pieces of fabric 1 and 2 over in such a way that above and below the seam 15 edges are formed through which the over-seam-needle 13 can stitch (Fig. 5).

To this end, the spreader 12 is provided at its forward end with a depression or cavity into which the seam 15 is moved by the ledge 14. The spreader 12 constitutes the extreme forward end of a curved arm 46 (Figs. 8, 42 and 43) which also contains the feed-device 47 (Fig. 26). The feed-device in the arm 46, the overseam needle 13, the looper 16 and ledge 14 together with the two presser-feet 48, 49 (Figs. 13, 39 and 40) constitute the means for producing the overseam to cover the regular seam.

The overseam needle 13 for the purpose of the uniform stitching of thick as well as thin materials and for producing the overseam is guided in an oscillating frame 50 (Figs. 31, 32, 33, 34) and is carried by a holder 51 rotatably mounted on the needle bar 21. The oscillating frame 50, at its lower end carries the ledge 14 above referred to and is continually pressed by a spring 52 against the seam 15 (Fig. 32). In this manner, the goods are always uniformly stitched whether the material is thick or thin.

The set screw 53 (Fig. 32) forms for the oscillating frame 50 an abutment which acts against the pressure of the spring 52, and by means of the set-screw 53 the stitch of the overseam needle 13 can be limited.

The cooperation of the overseam needle 13 with its looper 16 (Figs. 15, 16, 17) is new, in that there is imparted to the looper 16, in addition to the usual up- and downward movement, a lateral movement and a turn toward needle 13 near the end of the upward movement, so that needle 13 can pass between the finger 18 and the looper thread without the looper 16 on its return movement touching the needle since at this moment, the looper 16 makes a movement away from needle 13. Heretofore, for this purpose and especially so as to insure the engagement of the looper thread by the needle, the latter had to be provided with a recess, which weakened the needle and in frequent cases resulted in a breakage of the needle.

The up- and downward movement of looper 16 is effected by means of the ball-joint 54 pivoted to the main shaft 27 (Fig. 15) and a lever 31, which also produces the transverse movement of looper 5 cooperating with the needles 3 and 4. Its lateral movement, i. e. the movement, which is required to position looper 16 in its lower position back of the overseam needle 13 and in its upper position in front of needle 13, the looper 16 receives by means of a guide member 56 mounted on the looper shaft 55 from a lever 57. This lateral movement is so designed that the looper 16 near the end of its upward movement becomes slightly turned toward needle 13 and at the beginning of its downward movement becomes slightly turned away from needle 13.

The two pieces of fabric 1, 2, during the operation of needle 13 and looper 16 are held by the presser-feet 48 and 49 (Figs. 9, 10 and 11).

For feeding the pieces of fabric 1, 2, the feed-chain 47 (Figs. 10–13) is provided which chain is mounted in the curved arm 46 and feeds the fabric at the place where spreader 12 prepares the sewed-together pieces of fabric 1, 2 for the overseaming mechanism.

As shown more especially in Fig. 13, the feeding of the sewed-together pieces of fabric 1, 2 is effected on three sides simultaneously. As seen in Fig. 26, feed-chain 47 passes over two rollers 58, 59 which are respectively journalled in the curved arm 46 and in spreader 12. The chain 47 is positively guided by the groove 60 in roller 59 (Fig. 25) and by suitable guides 61, 62 at the forward end 63 of arm 46 (Fig. 28) for the purpose of preventing a yielding of the chain and of the pieces of fabric 1, 2 during the stitching operation of the overseam needle 13. The links of chain 47 are so constructed that the pivots 64 of each single link relative to the preceding end of the link are so disposed that the first teeth of the link 65 when assuming an inclined position on roller 59 (Fig. 30) do not project above the height of the links already in horizontal operating position, whereas the last teeth of the link 65 considerably project above the rear pivot 66 so that the rear teeth of the link 65 already are in working position before the link 65 leaves the roller 59. In this way the teeth of link 65 will engage the goods only when link 65 reaches the horizontal position, whereby an interference of the ledge 14 and of the needle 13 and a clamping of the goods in the feed-chain while passing from one link to the other is prevented.

The presser-foot 9 for the production of the ordinary seam is of well-known construction. It can be lifted by the levers 67 and 68 and is controlled by a helical spring 69 (Fig. 39).

The presser-foot device for the overseam differs essentially from the well-known presser-feet devices. The new device comprises two opposing presser-feet 48 and 49 (Fig. 40) which are mounted on the telescoping rods 70, 71 (Fig. 39). By these two presser-feet 48, 49, the material prepared for the overseam is pressed above and below against the feed-chain 47, and when the for-

needle of said second sewing mechanism to stitch through both the bent edges of the sewed together pieces of fabric on both sides of the uniting seam, an oscillating frame, a holder for the needle of said second sewing mechanism, means for guiding said holder in said frame, and a ledge carried by said frame and adapted to act as an abutment for the uniting seam.

5. The combination as set forth in claim 4, comprising a spring for moving said ledge into the path of the uniting seam, and a yielding movable part on said ledge adapted to automatically regulate the stitching of the needle of said second sewing mechanism according to the varying thickness of the material.

6. The combination with a sewing mechanism for uniting two pieces of fabric, of a second sewing mechanism for producing in the same operation an overseam to cover the uniting seam, a looper for the said first sewing mechanism, and a looper adapted to cooperate with the needle of the said second sewing mechanism, a means for imparting to the said last mentioned looper an up- and downward movement, and a means for imparting to said last mentioned looper a lateral movement and at the same time a turning movement toward the needle of said second sewing mechanism near the end of the ascent of said needle and a turning movement away from said needle near the beginning of its descent.

7. The combination with a sewing mechanism for uniting two pieces of fabric, of a second sewing mechanism for producing in the same operation an overseam to cover the uniting seam, the said first sewing mechanism comprising two needles and a single looper cooperating with said two needles, a looper cooperating with the needle of said second sewing mechanism, and a driving means for imparting to said last mentioned looper the required up- and downward movement, the said driving means also producing the required transverse movement of the first mentioned single looper.

8. The combination with a sewing mechanism for uniting two pieces of fabric, of a second sewing mechanism for producing in the same operation an overseam to cover the uniting seam, a single looper cooperating with the needles of the said first sewing mechanism, a looper cooperating with the needle of the said second sewing mechanism, two opposed presser feet provided for said second sewing mechanism, telescoping rods carrying said presser feet, and a common spring for yieldingly pressing said two opposed presser feet against the sewed together pieces of fabric respectively from above and below the same.

9. The combination with a sewing mechanism for uniting two pieces of fabric, of a second sewing mechanism for producing in the same operation an overseam to cover the uniting seam, loopers cooperating with said sewing mechanisms, presser feet therefor, and a trimming device interposed between said two sewing mechanisms, said trimming device comprising a stationary lower knife and sector-shaped swinging upper knife provided with a cutting edge along its circumference for cooperation with the cutting edge of said lower knife, and means for swinging said sector-shaped upper knife to and fro.

10. In the combination as set forth in claim 9, said means comprising an oscillatable arm carrying said upper knife, and an actuator therefor for swinging said arm towards the lower knife so that the cutting pressure between the said upper and lower knife automatically increases with increasing cutting resistance.

11. The combination as set forth in claim 9, comprising a rotatable arm carrying said upper knife, and an actuator therefor so that the cutting pressure between the said upper and lower knife automatically increases with increasing cutting resistance, a spring controlling said movable arm, and a means for operating said upper knife from the side diametrically opposite the trimming side.

12. The combination as set forth in claim 9, comprising a rotatable arm carrying said upper knife, and an actuator therefor so that the cutting pressure between the said upper and lower knife automatically increases with increasing cutting resistance, and a manually operated lever for swinging said upper knife about its own axis out of operative position to enable the said knives to be replaced and a convenient threading of the needle of said second sewing mechanism.

13. The combination with a sewing mechanism for uniting two pieces of fabric, of a second sewing mechanism for producing in the same operation an overseam to cover the uniting seam, and a feed device for feeding the sewed together pieces of fabric to said second sewing mechanism, said feed mechanism comprising elements acting on said sewed together pieces of fabric simultaneously on three sides.

14. The combination as set forth in claim 13 in which the feed device comprises an endless chain and driving rollers therefor, the links of the chain being connected by pivots so arranged as to cause the feed projections of each link to project beyond the projections of the next succeeding link as the latter passes over a roller.

15. The combination with a sewing mechanism for uniting two pieces of fabric, of a second sewing mechanism for producing in the same operation an overseam to cover the uniting seam, and a curved arm for said

second sewing mechanism adapted to receive sewed together and overseamed pieces of fabric of tubular shape, said arm having a forward end portion adapted to be swung out of operative position to enable finished pieces to be removed.

16. The combination with a sewing mechanism for uniting two pieces of fabric, of a second sewing mechanism for producing in the same operation an overseam to cover the uniting seam, presser-feet cooperating with said sewing mechanisms, spring thread tensions, a curved arm for said second sewing mechanism adapted to receive sewed together pieces of fabric of tubular shape, said arm having a movable forward end portion, a means for swinging said movable forward end portion out of operative position, and means actuated by said means for lifting off all the said presser feet and at the same time releasing all spring tensions.

17. The combination as set forth in claim 15, comprising an automatic safety means for automatically locking said movable forward end portion of said arm in operative position.

18. The combination as set forth in claim 15, comprising an automatic safety means for automatically locking said movable forward end portion of said arm in operative position, and a set screw for adjusting the position of the parts of said safety device relative to the needle of said second sewing mechanism.

In testimony whereof I affix my signature.

GUSTAV HÜBER.