H. I. ROSENBLUM.

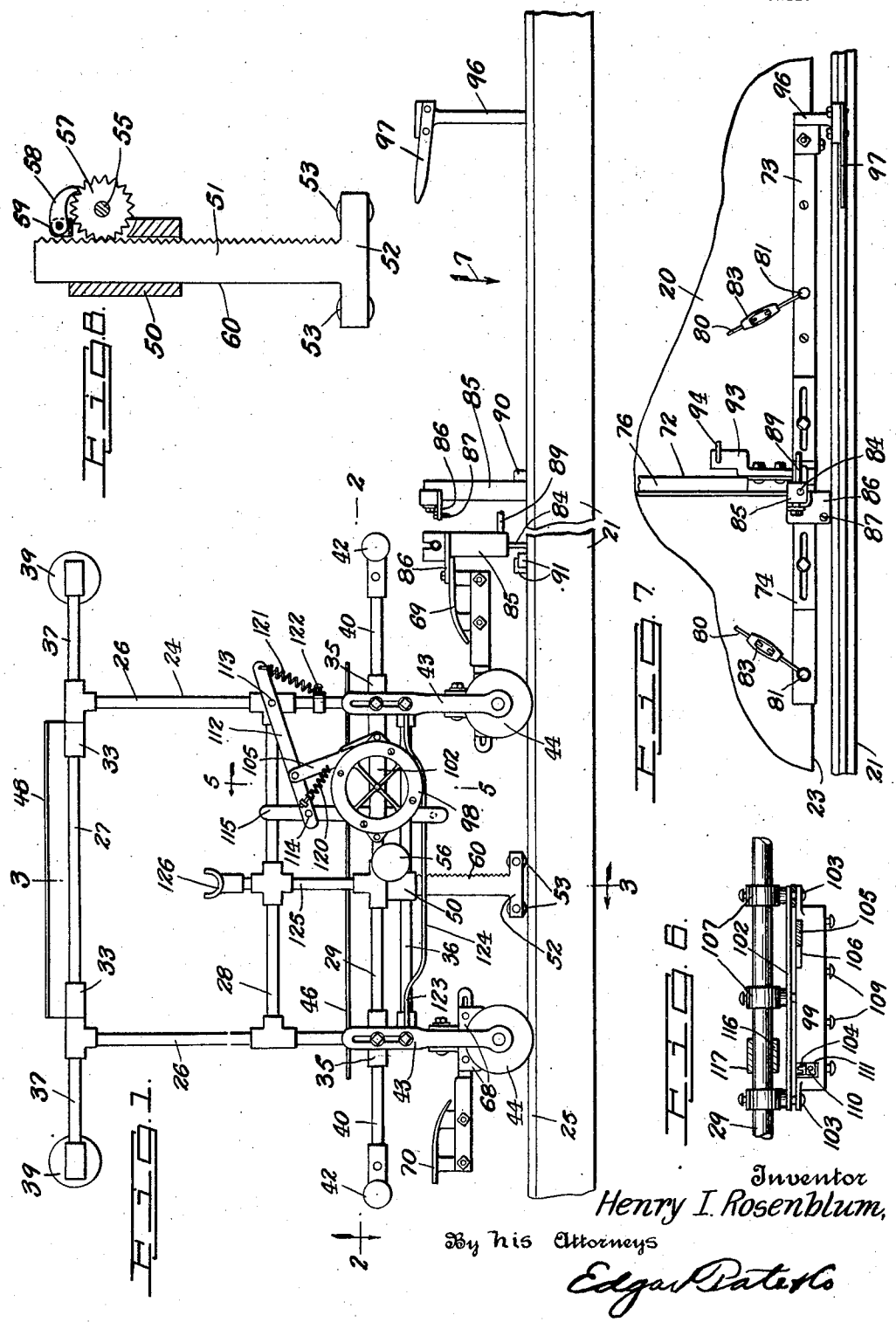
MACHINE FOR LAYING FABRICS.

APPLICATION FILED SEPT. 18, 1918.

1,343,339.

Patented June 15, 1920.

5 SHEETS—SHEET 1.



Inventor

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Edgar Patent Co

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MACHINE FOR LAYING FABRICS.

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5 SHEETS—SHEET 2.

FIG. 9.

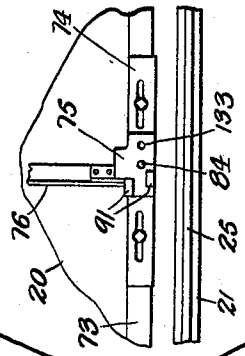


FIG. 10.

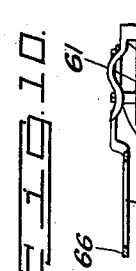


FIG. 11.

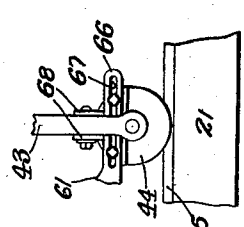
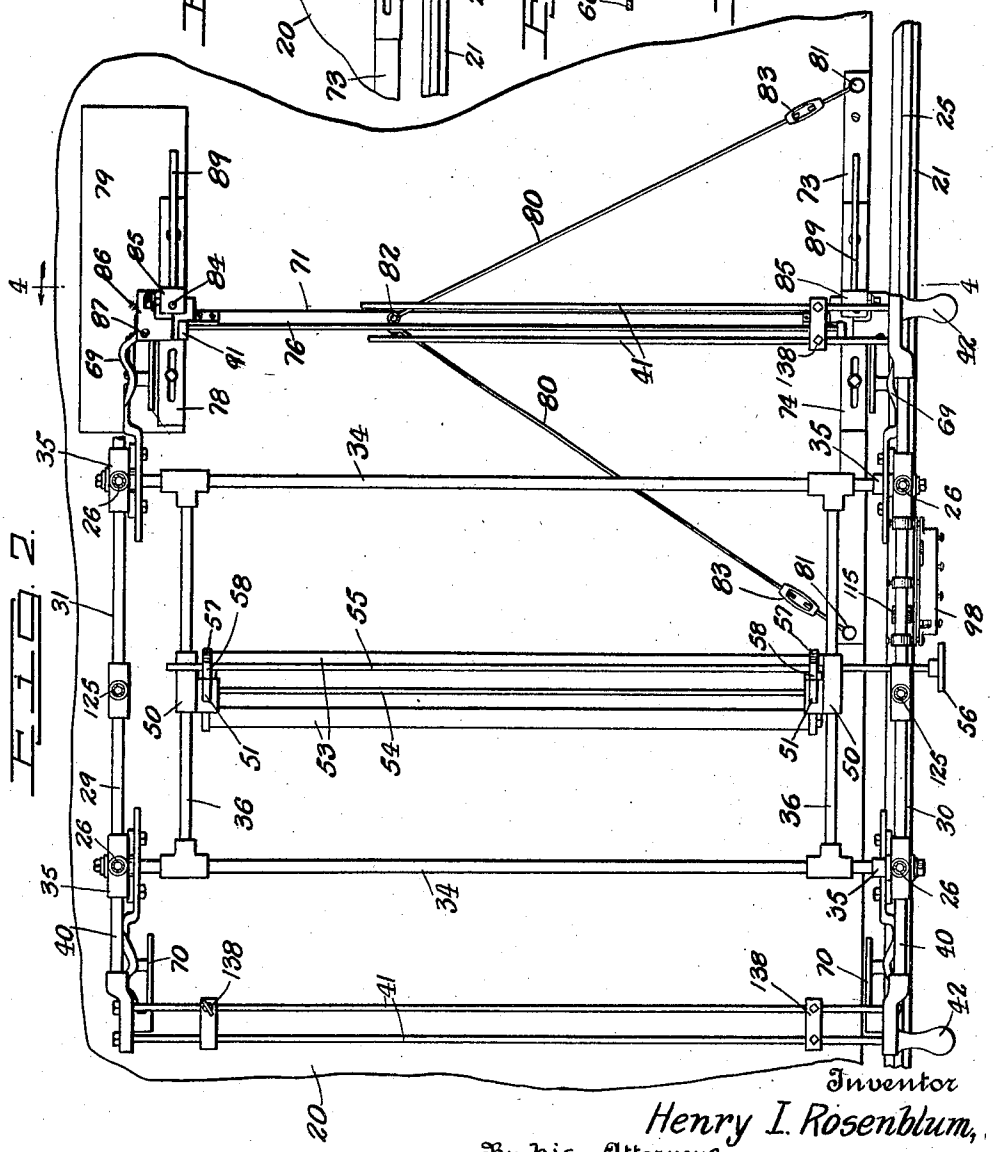


FIG. 2.



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5 SHEETS—SHEET 3.

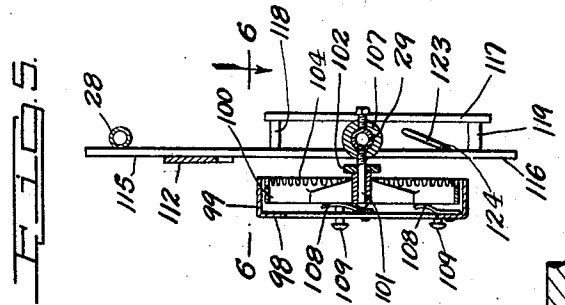


FIG. 5.

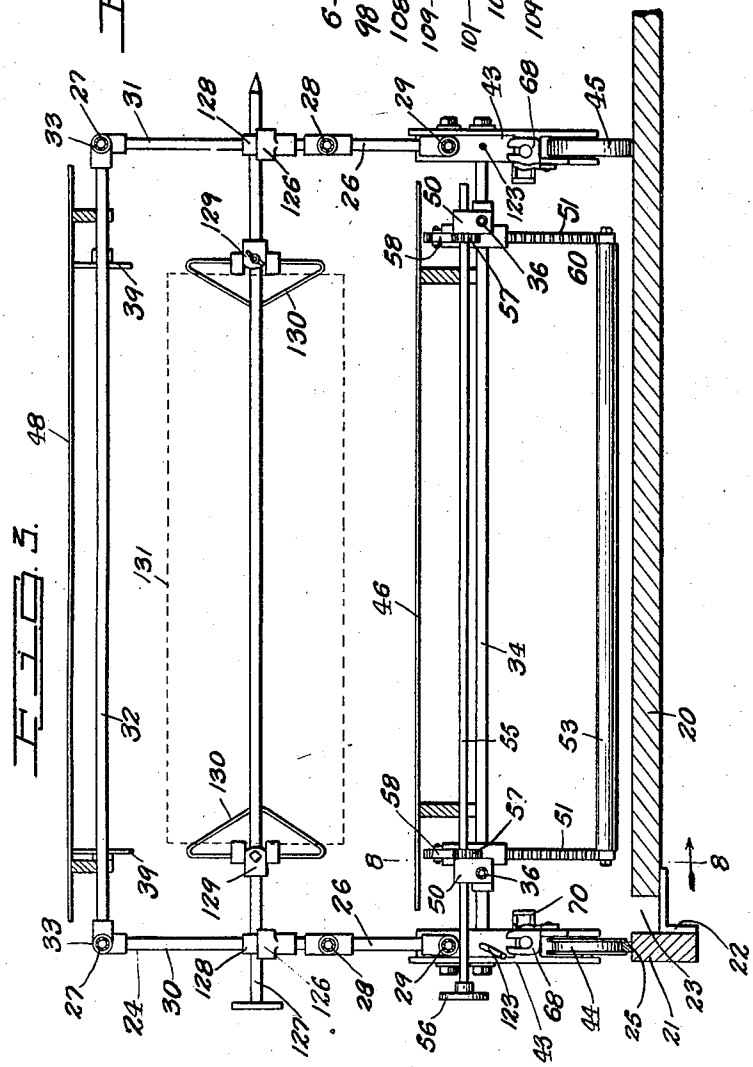


FIG. 3.

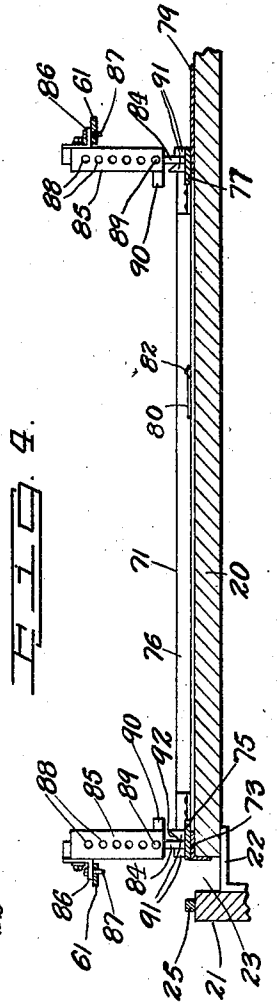


FIG. 4.

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MACHINE FOR LAYING FABRICS.

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5 SHEETS—SHEET 4.

FIG. 14.

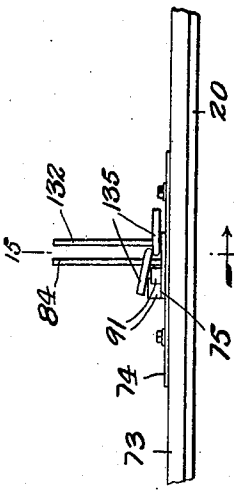


FIG. 13.

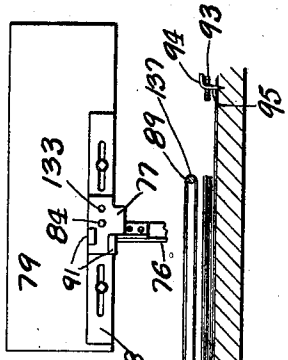


FIG. 15.

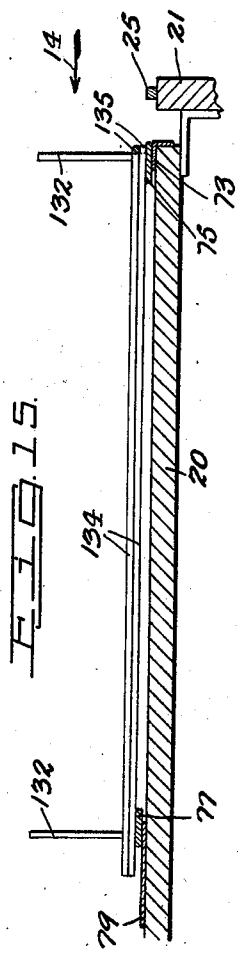
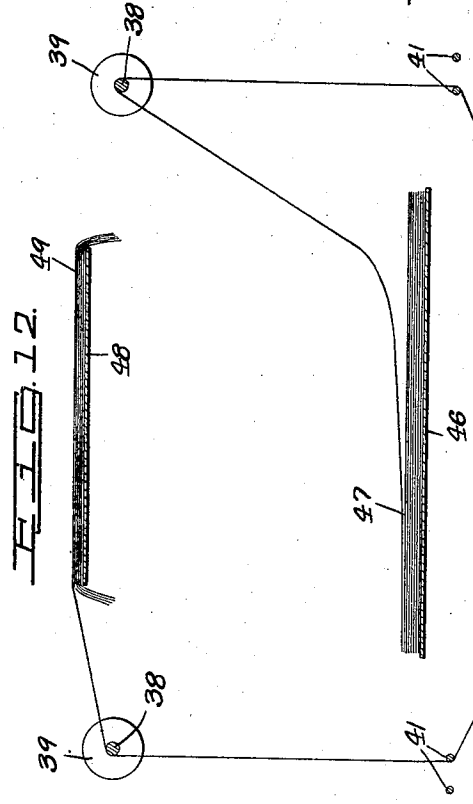


FIG. 12.



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MACHINE FOR LAYING FABRICS.

APPLICATION FILED SEPT. 18, 1918.

1,343,339. **Patented June 15, 1920.**

5 SHEETS—SHEET 5.

FIG. 16.

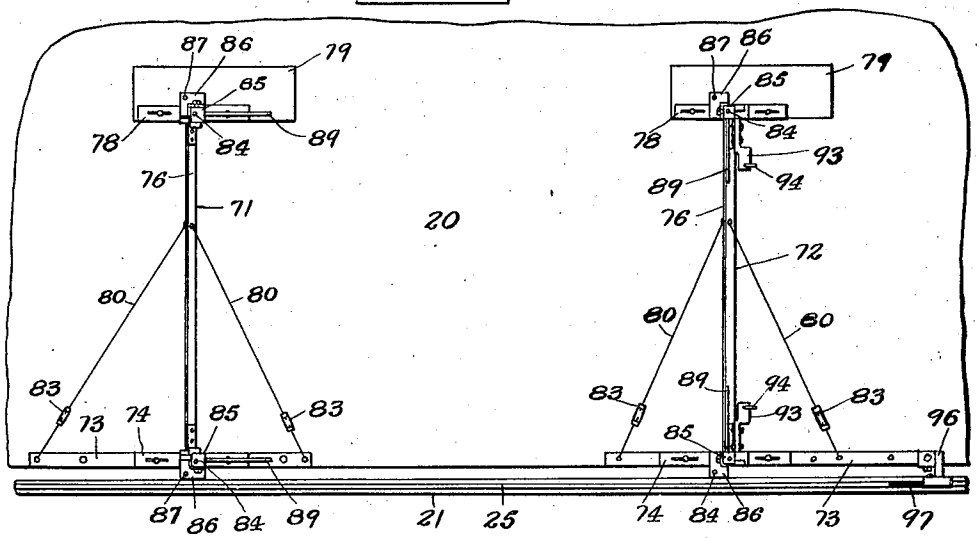


FIG. 17.

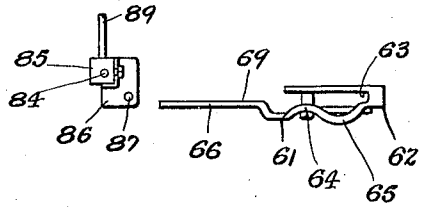


FIG. 18.

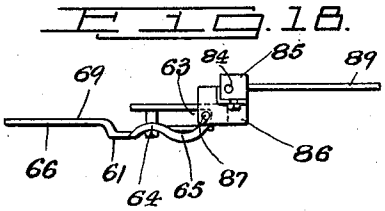


FIG. 19.

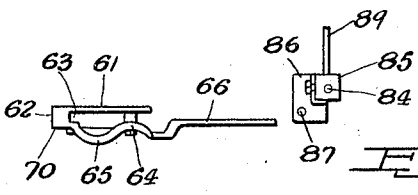


FIG. 20.

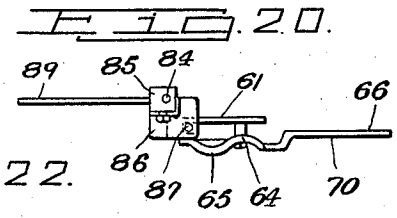


FIG. 22.

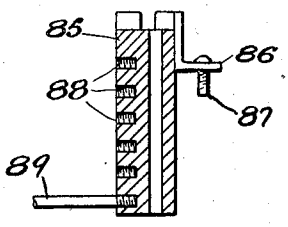
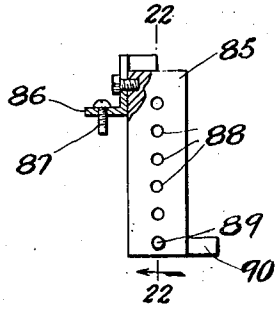


FIG. 21.



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MACHINE FOR LAYING FABRICS.

1,343,339. Specification of Letters Patent. Patented June 15, 1920.

Application filed September 18, 1918. Serial No. 254,597.

To all whom it may concern:

Be it known that I, HENRY I. ROSENBLUM, a citizen of the United States, and residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Machines for Laying Fabrics, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to apparatus used in the manufacture of garments of various kinds and classes and particularly for use in the laying of fabrics in piles on a table prior to placing the patterns on said piles and cutting garments or parts of garments therefrom, and the object of the invention is to provide an apparatus of the class and for the purpose specified which involves a machine movable longitudinally of the table and which is designed to lay cloth or sheets of cloth of any width in piles of any desired length to be operated upon as above set out; a further object being to provide a machine of the class specified which is designed to lay either one or more sheets or plies of fabric on the table in a single operation or at each movement thereof over the table; a still further object being to provide means for automatically recording the number of sheets or plies of cloth in a pile; and with these and other objects in view the invention consists in an apparatus of the class and for the purpose specified, constructed and operating as hereinafter described and which is simple in construction and operation and efficient in use.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which:—

Figure 1 is a side view of a table partly broken away and showing my improvement in connection therewith;

Fig. 2 a partial section on the line 2—2 of Fig. 1;

Fig. 3 a partial section on the line 3—3 of Fig. 1 and showing details of construction not shown in Fig. 1;

Fig. 4 a partial section on the line 4—4 of Fig. 2;

Fig. 5 a partial section on the line 5—5 of Fig. 1 and on an enlarged scale;

Fig. 6 a partial section on the line 6—6 of Fig. 5;

Fig. 7 a plan view of one end portion of the table and showing my attachment thereto and looking in the direction of the arrow 7 of Fig. 1;

Fig. 8 a partial section on the line 8—8 of Fig. 3 and on an enlarged scale;

Fig. 9 a view similar to Fig. 7 but showing the other end portion of the table and with part of the construction omitted;

Fig. 10 a plan and sectional view of one of a number of shoes which I employ;

Fig. 11 an inside detail view of one of the roller supports of the machine and showing the method of connecting one of the shoes shown in Fig. 10 therewith;

Fig. 12 a central longitudinal and diagrammatic section of the machine and showing the method of laying two strips or plies of material in one operation;

Fig. 13 a view similar to Fig. 9 but showing the opposite side of the table and with part of the construction omitted;

Fig. 14 a partial side view of the machine with parts omitted and showing a different method of laying the fabric upon the table, said figure looking in the direction of the arrow 14 of Fig. 15;

Fig. 15 a partial section on the line 15—15 of Fig. 14;

Fig. 16 is a diagrammatic plan view of a part of the apparatus and showing two frames which I employ and their relative positions;

Figs. 17 and 18 are diagrammatic detail views illustrating the operation of one of a number of shoe members and folding members which I employ;

Figs. 19 and 20 are views similar to Figs. 17 and 18 but illustrating the operation of another of the shoe members in connection with another folding member;

Fig. 21 an enlarged detail view of one of the folding members which I employ and shown in the same position as illustrated in Fig. 4 of the drawing; and,

Fig. 22 a sectional view on the line 22—22 of Fig. 21.

In the practice of my invention I provide a table 20 upon which the cloth is to be laid, said table being of predetermined length and width and at the front side thereof is a board 21 secured to the table 20 by brackets 22 and between the board 21 and correspond-

ing edge of the table 20 is a space 23, as clearly shown in Fig. 3 of the drawing.

My fabric laying machine 24 is mounted to move longitudinally of the table 20 and board 21, or on a rail 25 on the top face of said board, and in the construction thereof I provide two pair of vertical standards 26 at the front and back of the machine, each of said pair being connected at the top by a cross head 27, approximately centrally thereof by a cross member 28 and adjacent to the lower ends thereof by another cross member 29, and each of these constructions constitute front and back frame members 30 and 31 respectively, which are connected at the top by forwardly and backwardly directed rods 32 coupled with the top cross head 27 as shown at 33, and also connected adjacent to the bottom thereof by forwardly and backwardly directed rods 34 coupled with the standards 26 as shown at 35, and the forwardly and backwardly directed rods 34 are joined adjacent to the front and rear ends thereof and inwardly of the frames 30 and 31 by cross rods 36.

The top cross head members 27 of the frames 30 and 31 are extended at the left and right as shown at 37, and the end portions thereof are connected by cross rods 38 upon which are mounted gage devices 39, which serve to guide the fabric as it passes over the rods 38, as hereinafter described. The cross members 29 at the base of the frames 30 and 31 are also extended as shown at 40 and the end portions thereof are each connected by a pair of forwardly and backwardly directed guide rods 41 as clearly shown in Figs. 2 and 12 and between which the material passes as hereinafter described, and the front cross member 29 is provided at its ends with forwardly directed hand pieces 42, whereby the machine may be moved longitudinally of the table 20 and rail 25.

The above described construction constitutes the main skeleton or framework of the machine and, in practice, I adjustably secure to the lower end portions of the vertical members 26 of the frames 30 and 31, depending roller supports 43, and grooved rollers 44 are rotatably mounted in the supports of the front frame 30, while plain rollers 45 are rotatably mounted in the supports of the back frame 31, as clearly illustrated in Fig. 3, and by means of these rollers, the machine may be freely moved longitudinally of the table 20 and guided in this movement by the engagement of the grooved rollers 44 with the rail 25.

Mounted upon the forwardly and backwardly directed rods 34 is a main bottom platform or table 46 upon which the fabric to be laid upon the table 20 is placed, as illustrated at 47 in Fig. 12. A supplemental top table or platform 48 is mounted upon the forwardly and backwardly directed rods 32 joining the top cross head 27 and upon which other fabric 49 may be placed.

Secured approximately, centrally of the cross rods 36 which join the rods 34 are blocks 50 in which are mounted vertically movable racks 51 at the bottoms of which are cross heads 52 connected by two rollers 53 and a central cross rod 54. A forwardly and backwardly directed shaft 55 passes through each of the blocks 50 and the front end thereof extends beyond the front frame 30 and is provided with a hand-piece 56. Secured to said shaft within the blocks 50 are gear wheels 57 which coöperate with the racks 51 to move the same vertically in the blocks 50 when the shaft 55 is rotated. Pawls 58 are pivoted to the top of the blocks 50 as shown at 59 and coöperate with the gear wheels 57 to hold them in any desired position.

The above described rack construction constitutes a vertically movable guide member 60 through which the fabric passes in the operation of laying it upon the table 20, and by means of which the fabric is laid smoothly upon the table and also stretched or drawn taut, and as the sheets or plies of fabric increase, said guide member is moved vertically so that the rollers 53 rest upon or have a slight clearance with the top sheet or ply.

I also preferably employ four shoe members 61, one of which is shown in detail in Fig. 10, and the operation of two of which is shown in Figs. 17 to 20 inclusive, and each of which consists of a downwardly curved head portion 62 having an aperture 63, with offset portions 64 and 65 therein, and said shoes are provided with arms 66 having an elongated slot 67. The arms 66 are adapted to be adjustably connected with the roller supports 43 or to brackets 68 secured at the opposite sides thereof. The connection of the shoes 61 with the roller supports 43 is such that said shoes will extend outwardly from the right and left hand sides of the frame, as clearly shown in Figs. 1 and 2 to form two pair of shoe members 69 and 70, the pair 69 being at the right of the machine while the pair 70 is at the left thereof, and it will be noted that the right hand pair are set a predetermined distance lower than the left hand pair, as clearly illustrated in Fig. 1.

Two supplemental frame members 71 and 72 are connected with the table 20 in the manner shown in Fig. 16, and these frames each consist of front cross plates 73 to the top faces of which are adjustably connected strips 74, having central block portions 75 to which are secured forwardly and backwardly directed angle irons 76 secured to similar blocks 77 on strips 78 adjustably mounted on rectangular flat plates 79, which

are placed upon the table 20. Said frames, as above described, are preferably secured to the table 20 at predetermined points and the frame 71 remains permanently in one position, while the frame 72 is adjustable toward and from the same, but it will be understood that the frame 71 may also be adjustable, and said frames are also preferably reinforced by stay wires 80 connected with the end portions of the front cross plates 73 at 81 and to the angle irons 76 as shown at 82, and turnbuckles 83 are mounted in said wires whereby the tension thereof may be regulated.

The above described construction pertaining to each of the frames 71 and 72 is common and in the construction shown in Figs. 1 to 13 and 16 to 22 inclusive, the blocks 75 and 77 of each of said frames are provided centrally with vertical rods 84, and mounted on said rods are vertically movable guide and folding members 85 at the top of which are adjustably connected horizontal plates 86, having downwardly directed pins 87 in one corner portion thereof, which pins are adapted to coöperate in the recesses 63 of the shoes 61 and the offset portions 64 and 65 thereof, when said shoes strike the bottom faces of the plates 86 and raise the members 85 on the rods 84.

The members 85 are provided in one face thereof with a plurality of vertically arranged holes 88 and with which are adjustably connected fingers 89 around which the fabric laid upon the table is adapted to pass, and which form the folding members for said fabric when in their normal position, as shown in Figs. 17 and 19 and at the right of Fig. 16 but said fingers are moved outwardly into the position shown in Figs. 1, 2, 4, 18 and 20 and at the left of Fig. 16 by the shoes 61 operating upon the plates 86 and pins 87 thereof, which operation raises the members 85 and rotates them one-quarter revolution, as illustrated in Figs. 17 to 20 inclusive and as hereinafter described.

The guide and folding members 85 of the frame 71 are shorter than the corresponding members of the frame 72 and the pair of shoe members 69 are adapted to coöperate with the guide members 85 of the frame 71, while the pair of shoe members 70 coöperate with the guide members 85 of the frame 72, and when said guide members 85 are in their depressed or operative position, lugs 90 on the bottom portion thereof coöperate with a pair of upwardly directed lugs 91 on each of the blocks 75 and 77 to hold said members from rotation, and one of said lugs 91 on each of said blocks is beveled as shown at 92 to permit of the passage of the lug 90 thereover, while the members 85 are raised and rotated.

Secured to the opposite ends of the angle iron 76 of the frame 72 are inwardly directed members 93 adapted to carry L-shaped pins 94, which serve to secure the free end portion or portions of the fabric laid upon the table 20, as shown at 95 in Fig. 12 of the drawing and these pins 94 and members 93 are also shown in Fig. 16.

Secured to one end portion of the plate 73 of the frame 72 is a bracket 96 to the top of which is secured an upwardly inclined finger piece 97 which is adapted to coöperate with a registering mechanism 98 secured to the front frame 30 of the machine, and by means of which the number of plies or sheets laid upon the table may be automatically recorded.

The registering mechanism 98 consists of a cup-shaped annular casing 99 within which is mounted an annular wheel 100 rotatably mounted on a shaft 101, having a bearing in a cross member 102 secured to the back face of the casing 99 as shown at 103 in Fig. 6, and one side edge of the wheel 100 is provided with a plurality of teeth or projections 104 in connection with which a finger 105 operates, said finger passing through a slot or aperture 106 in the wall of the casing 99, as shown in Fig. 6 of the drawing.

The casing 99 is adjustably supported on the bottom cross rod 29 of the front frame 30 by means of a plurality of sleeves 107, and a plurality of tensional devices 108 are mounted within the casing 99 and coöperate with the front face of the wheel 100 to hold the same against accidental rotation, said tensional devices being controlled by adjusting screws 109. The periphery of the wheel 100 is provided inwardly of the teeth or projections thereof with a scale 110, as illustrated in Fig. 6, the numerals of which correspond with the number of teeth or projections on said wheel, and as the wheel is advanced by the finger 105, the recording of this operation may be noted through an aperture 111 in the casing 99.

The finger 105 is operated through the lever 112 pivoted to the front frame 30 at 113. Pivoted to one end of the lever at 114 is a vertically movable yoke 115, consisting of front and back plates 116 and 117 connected at the top and bottom by pins 118 and 119. The yoke 115 is guided by the cross members 28 and 29, as clearly shown in Figs. 5 and 6.

In the operation of the machine over the table 20 and when the same reaches the right hand end of said table, the finger 97 will strike the pin 119 of the yoke 115 and depress the same, which operation will also depress the finger 105 and rotate the wheel 100 a fraction of a revolution to record on the scale 110 the number of plies or sheets laid upon the table and, in practice, I preferably connect the finger 105 and lever 112

by a spring 120, which normally holds the finger in proper position. The lever 112, or the free end thereof is provided with a spring 121 which is connected with the frame 30 as shown at 122 and serves to hold the yoke 115 in its proper position.

The roller supports 43 of each frame 30—31 are preferably connected by cross rods 123, said rod of the frame 30 being bent outwardly and downwardly to a slight extent as shown at 124, which aids in guiding the yoke 115 in its vertical movement.

The cross members 28 and 29 of each of the frames 30—31 are connected approximately, centrally thereof, by vertical rods 125 which extend above the cross rods 28 and to the top of which are secured arc-shaped bearing seats 126, and a forwardly and backwardly directed shaft 127 is mounted in the bearing seats 126, or bearing members 128 on said shaft are placed in said seats. Secured to the shaft 127 inwardly of the ends thereof are blocks 129 carrying or supporting triangular-shaped bodies 130, which are adapted to pass into and support what are known as bolts of fabric, as indicated in dotted lines at 131 in Fig. 3, and said construction involving the shaft 127, blocks 129 and triangular bodies 130 form a rotary support for said bolts, whereby the fabric thereof may be unwound and laid upon the table 20 as hereinafter described.

In Figs. 14 and 15 of the drawing, I have shown a slight modification of that shown in Figs. 1 to 13 inclusive, which consists in removing the members 85 from the rods 84 and securing supplemental rods 132 in holes 133 in the blocks 75 and 77 to form two vertical standards at the opposite sides of each of the supplemental frames 71 and 72 between each of which are adapted to be placed two cross rods 134, the front ends of which are provided with hand-pieces 135 bent at right angles thereto. The object of the construction shown in Figs. 14 and 15 is to provide hand-operated means for producing the fold in the fabric in the operation of laying the same upon the table 20, which is automatically produced by the fingers 89 on the members 85 in the construction shown in Figs. 1 to 13 and 16 to 22 inclusive.

The operation of the machine, as shown in Figs. 1 to 13 and 16 to 22 inclusive, will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement. In laying a single ply or sheet of material upon the table 20, the same being taken from a pack such as that shown at 47 in Fig. 12, or from a bolt indicated in dotted lines in Fig. 3, the end portion thereof is threaded through the machine by first passing it over one of the rods 38 down between one of the pair of rods 41 and between one of the rollers 53 and the rod 54 and around said roller and secured to one end portion of the table 20 by the pins 94 beyond the adjacent guide and folding members 85, as illustrated at 95 in Fig. 12, after which the machine is moved to the left in which operation the shoe members 69 will operate the guide and folding members 85 at the left hand end portion of the table to raise the same and rotate them one-quarter revolution, which moves the fingers 89 thereof outwardly into the position shown in Fig. 2 and at the left of Fig. 16, after which the machine is moved to the right, in which operation the members 85 at the left of the table drop by gravity and the fingers 89 thereof move inwardly as shown in Fig. 17, and the cloth or fabric passes thereover to form a fold in said cloth or fabric at the left hand end of the table as shown at 136 in Fig. 12 of the drawing. When the machine reaches the extreme right of the table, the shoe members 70 will coöperate with the guide and folding members 85 at said end of the table to raise and rotate the same which operation moves the fingers 89 of said members 85 from the position shown in Fig. 19 to that shown in Fig. 20, and by again moving the machine to the left said guide members will drop by gravity and the fingers 89 thereof again move inwardly into the position shown in Fig. 19 and at the right of Fig. 16 so as to permit the cloth or fabric to pass thereabout and thereover to form a fold 137 at the right hand end of the table. In both of the above described operations of the guide and folding members 85, the pins 87 thereof operate in the offset portions 64 and 65 of the shoe members 69 and 70, and said offset portions also serve to operate the pins 87 to turn the members 85 and to move the fingers 89 thereof, as above described.

The above described operation is continued until all of the fabric in the stack or bolt is exhausted, or until the desired number of plies or sheets are produced in the pile and, as hereinbefore stated, when the machine reaches the extreme right of the table the registering device 98 is operated to record the number of plies laid upon the table, and as the height of the pile increases, the vertically movable guide member 60 is moved vertically by rotating the shaft 55 so that the rollers 53 thereof clear the top ply or sheet of the pile.

It will be noted that after a number of plies or sheets have been laid upon the table, the above described rotary movement of the guide and folding members 85 withdraws the fingers 89 thereof from the fold and places it upon the top of the fabric laid by

the advance of the machine over the table. The fingers 89 at the opposite end of the table holds the material in proper position in this operation.

The foregoing description of the operation of the machine has been limited to the laying of a single ply or sheet but, as illustrated in Fig. 12, two plies or sheets of material may be laid in a single operation by placing a stack of the material on each of the tables, or supporting platforms 46 and 48, as shown at 47 and 49 in said figure, and threading the same through the machine as illustrated, connecting the ends of said material by the pins 94 as shown at 95, and the operation will be exactly the same as in the laying of a single ply or sheet.

The operation of the construction shown in Figs. 14 and 15 will be exactly the same as that shown in Figs. 1 to 13 and 16 to 22 inclusive, except that the automatic folding of the fabric as it is laid upon the table is done away with by removing the guide and folding members 85, and when the machine reaches the extreme left or right of the table 20 one of the cross rods 134 is placed upon the top of the fabric with the other cross rod therebeneath, and as the plies or sheets increase the bottom cross rods at each end of the table are withdrawn and placed upon the top of the fabric thus leaving two cross rods 134 at each end of the table at all times. This last described method of operation is not preferred by reason of the fact that much time is lost in the manipulation of the rods 134, but it will be found necessary to use this method of folding the fabric when thin or silky fabrics are laid upon the table 20. The automatic folding device shown in Figs. 1 to 13 and 16 to 22 inclusive is particularly designed for use in connection with strong and heavy fabrics.

Each pair of the cross heads 41 are provided adjacent to the front and rear ends thereof with gage devices 138, which guide the fabric as it passes between said rods and prevents the shifting of said fabric forwardly and backwardly in the operation of laying it upon the table.

While I have shown and described certain details of construction for carrying my invention into effect, it will be understood that I am not necessarily limited to such details, as various changes therein and modifications thereof may be made, within the scope of the appended claims, without departing from the spirit of my invention or sacrificing its advantages.

It will be understood that as the plies or sheets of the fabric increase upon the table in the operation of the machine the fingers 89 of the members 85 are raised on said members by properly inserting said fingers in the series of vertically arranged holes 88.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a fabric laying machine of the class described, said machine being mounted to move longitudinally of a table or support, means for guiding the machine in its movement on said table, a plurality of guide and folding members movably mounted on said table at spaced intervals, and devices on said machine coöperating with said members to give the same a combined vertical and rotary movement in the operation of the machine over the table.

2. A fabric laying machine of the class described, comprising a main frame having front and back frame members, guide rollers adjustably connected with the bottom of the front and back frame members, fabric supporting tables mounted in the main frame between the front and back frame members, a vertically movable guide member mounted centrally of the main frame and between said front and back frame members, means for moving said guide member vertically, said machine being mounted to move longitudinally of a supporting table, guide and folding members movably mounted at spaced intervals upon said table, and shoe devices adjustably connected with the front and back frame members of the machine and adapted to coöperate with said guide and folding members in the movement of the machine over the supporting table to give said members a combined vertical and rotary movement.

3. A fabric laying machine of the class described, comprising a main frame having front and back frame members, guide rollers adjustably connected with the bottom of the front and back frame members, fabric supporting tables mounted in the main frame between the front and back frame members, a vertically movable guide member mounted centrally of the main frame and between said front and back frame members, means for moving said guide member vertically, said machine being mounted to move longitudinally of a supporting table, guide and folding members movably mounted at spaced intervals upon said table, shoe devices adjustably connected with the front and back frame members of the machine and adapted to coöperate with said guide and folding members in the movement of the machine over the supporting table to give said members a combined vertical and rotary movement, and means for rotatably supporting a bolt of fabric between the front and back frame members.

4. A fabric laying machine of the class described, comprising a main frame having front and back frame members, guide rollers adjustably connected with the bottom of the

front and back frame members, fabric supporting tables mounted in the main frame between the front and back frame members, a vertically movable guide member mounted centrally of the main frame and between said front and back frame members, means whereby fabric supported on said tables may be threaded through the machine and through said guide member, said main frame being adapted to be moved longitudinally of a supporting table, two supplemental frames mounted on said table, a pair of guide and folding members movably mounted on each of said supplemental frames and two pair of devices adjustably mounted on the main frame and each pair of which is adapted to coöperate with a pair of the guide and folding members on said supplemental frames to give the same a combined vertical and rotary movement.

5. A fabric laying machine of the class described, comprising a main frame having front and back frame members, guide rollers adjustably connected with the bottom of the front and back frame members, means for supporting fabric in the main frame, a vertically movable guide member mounted centrally of the main frame and between said front and back frame members, said main frame being adapted to be moved longitudinally of a supporting table, two supplemental frames mounted on said table, one of which is adjustable toward and from the other, a pair of guide and folding members movably mounted on each of said supplemental frames and two pairs of devices adjustably mounted on the main frame and each pair of which is adapted to coöperate with a pair of the guide and folding members on said supplemental frames to give the same a combined vertical and rotary movement, means whereby said fabric may be threaded through the machine and through said central guide member, and means for securing the end portion thereof to the supporting table at a predetermined distance beyond one pair of the guide and folding members.

6. A fabric laying machine of the class described, comprising a main frame having front and back frame members, guide rollers adjustably connected with the bottom of the front and back frame members, means for supporting fabric in the main frame, a vertically movable guide member mounted centrally of the main frame and between said front and back frame members, said main frame being adapted to be moved longitudinally of a supporting table, two supplemental frames mounted on said table, one of which is adjustable toward and from the other, a pair of guide and folding members movably mounted on each of said supplemental frames and two pairs of devices adjustably mounted on the main frame and each pair of which is adapted to coöperate with a pair of the guide and folding members on said supplemental frames to give the same a combined vertical and rotary movement, means whereby said fabric may be threaded through the machine and through said central guide member, means for securing the end portion thereof to the supporting table at a predetermined distance beyond one pair of the guide and folding members, and means for moving the central guide member vertically in the main frame.

7. A fabric laying machine of the class described, comprising a main frame having front and back members, guide rollers adjustably connected with the bottom corner portions of said front and back frame members, fabric supporting tables mounted centrally of the main frame and between the front and back frame members, a vertically movable and adjustable guide member mounted centrally of the main frame, means at one side of the main frame for moving said member vertically, said machine being mounted to move longitudinally of a supporting table, means for guiding the machine in its movement over said table, a plurality of guide and folding members vertically and rotatably mounted at spaced intervals upon said table, shoe devices adjustably connected with the front and back frame members of the machine and adapted to cooperate with said guide and folding members in the movement of the machine over the supporting table, and means for guiding the fabric employed in connection with the machine as it passes through the machine onto said supporting table.

8. A fabric laying machine of the class described, comprising a main frame having front and back frame members, rollers adjustably connected with the corner portions of said front and back frame members to permit of the movement of and guiding of the machine over a supporting table, supplemental frames adjustably mounted on the supporting table and adapted to be moved toward and from each other, a pair of guide and folding members rotatably and vertically movably mounted in each of said supplemental frames, and two pair of shoe devices adjustably connected with the front and back members of the frame and each pair of which are adapted to operate in connection with the separate pairs of guide and folding members to give said members their movement.

9. A machine of the class described for laying fabric on a table over which the carriage of the machine passes, said machine being provided with two supplemental frames mounted on said table and one of which is adjustable toward and from the other, a pair of guide and folding members

movably mounted on each of said frames, finger pins adjustably mounted in each of said members and two pair of devices mounted on the carriage of the machine and coöperating with the separate pair of guide and folding members on said frames for giving the same a vertical and rotary movement to move the finger pins thereof through an arc of forty-five degrees.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 13th day of Sept. 1918.

HENRY I. ROSENBLUM.

Witnesses:
C. E. MULREANY,
H. E. THOMPSON.