June 24, 1952 F. R. SHOAF ET AL 2,601,229

HOSIERY INSPECTION AND MENDING FORM

Filed May 11, 1949 4 Sheets-Sheet 1

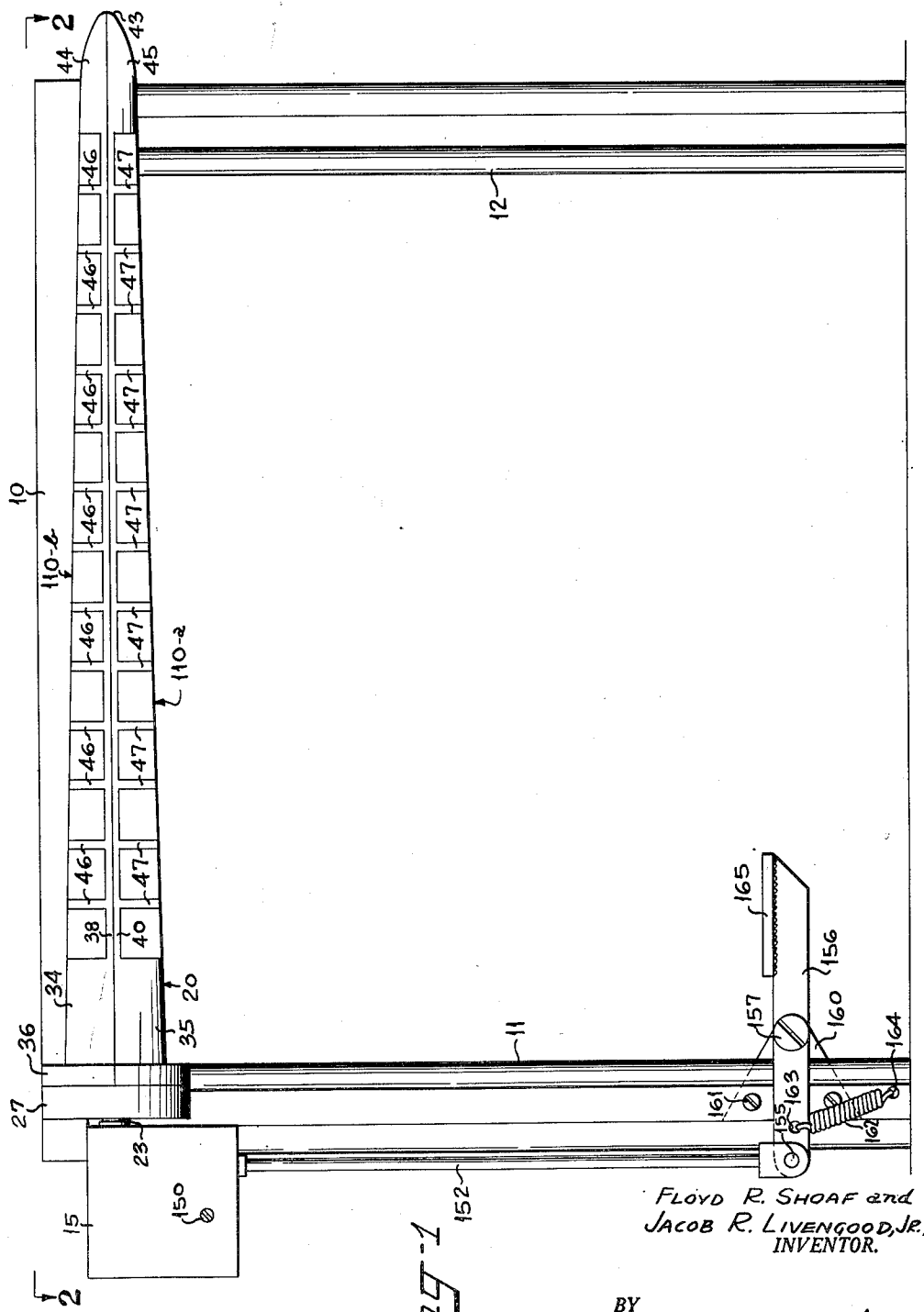


Fig-1

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HOSIERY INSPECTION AND MENDING FORM

Filed May 11, 1949 4 Sheets-Sheet 2

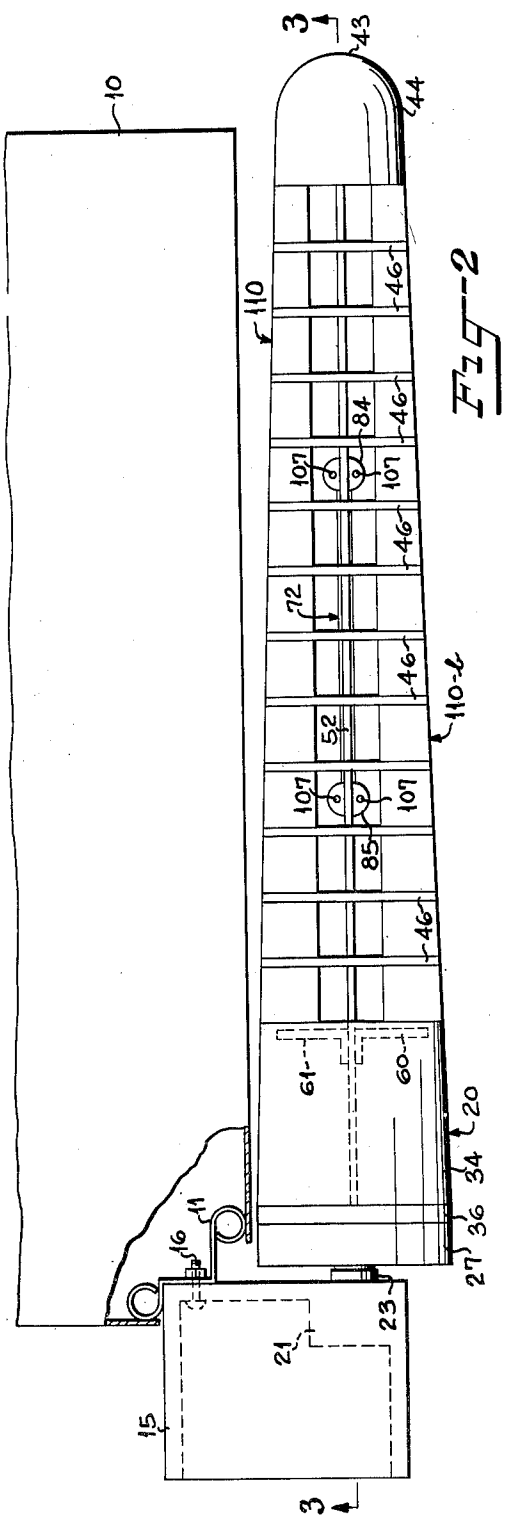


Fig-2

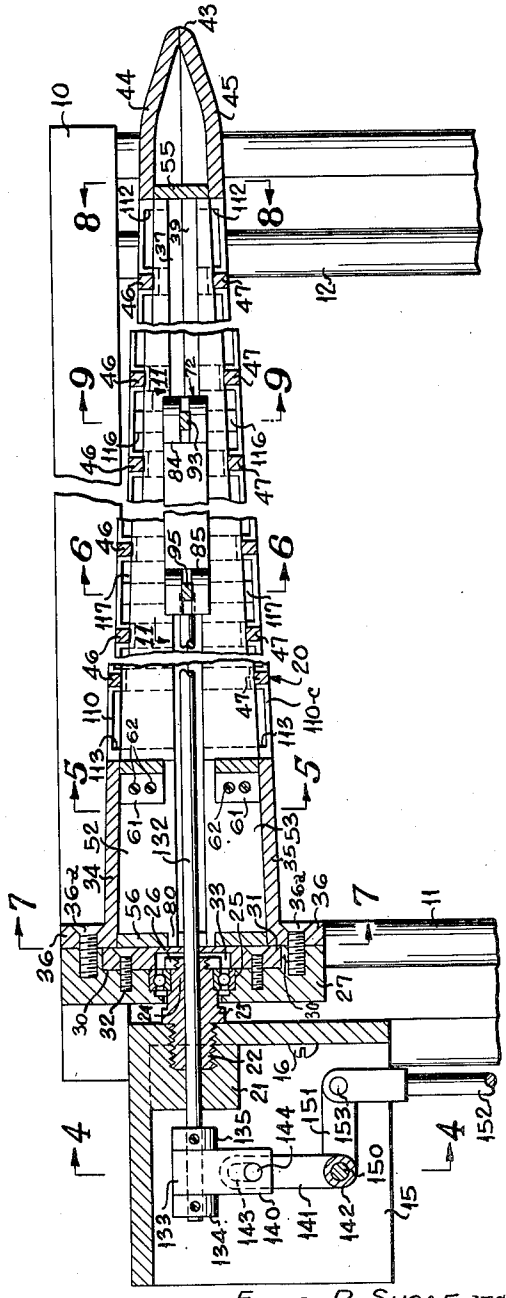


Fig-3

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HOSIERY INSPECTION AND MENDING FORM

Filed May 11, 1949 4 Sheets-Sheet 3

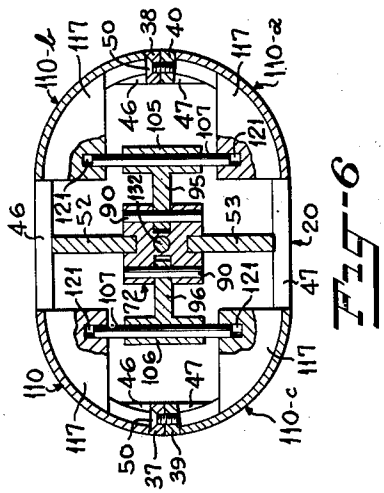


Fig-6

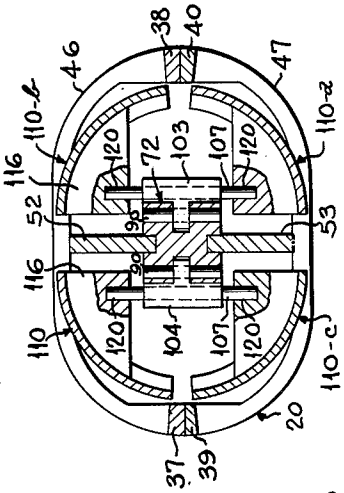


Fig-9

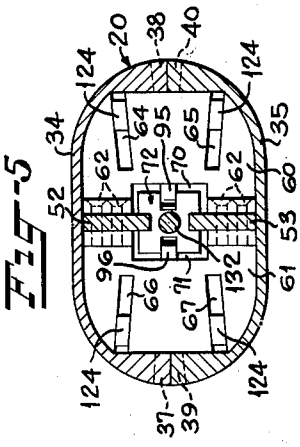


Fig-5

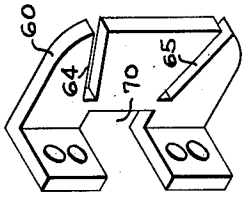


Fig-10

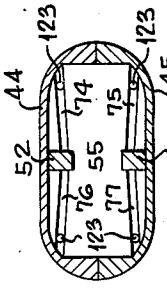


Fig-8

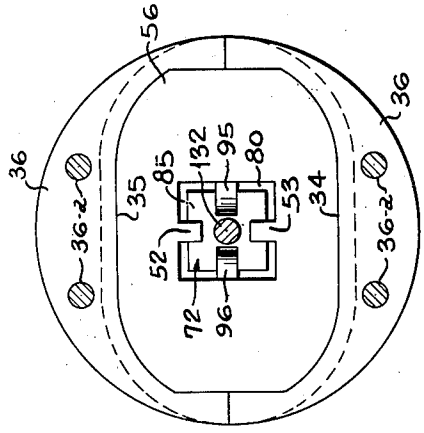


Fig-7

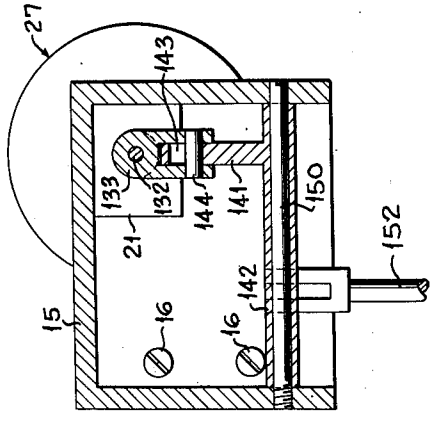


Fig-4

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June 24, 1952 F. R. SHOAF ET AL 2,601,229

HOSIERY INSPECTION AND MENDING FORM

Filed May 11, 1949 4 Sheets-Sheet 4

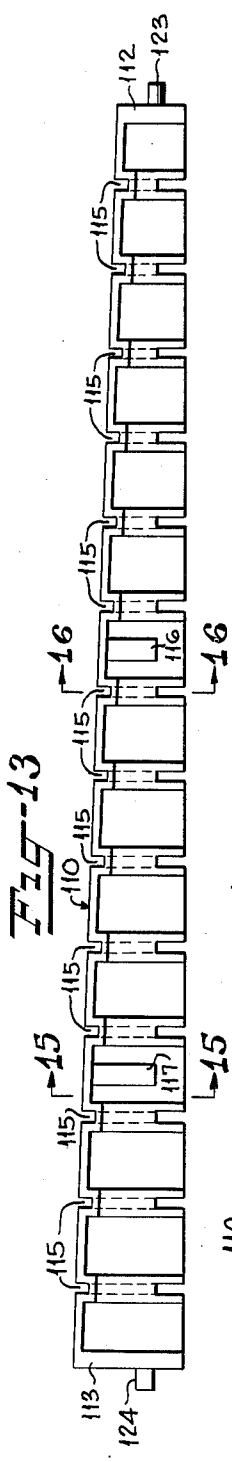


Fig-13

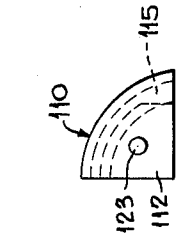


Fig-16

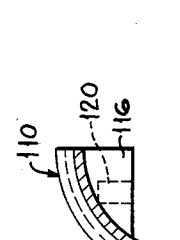


Fig-15

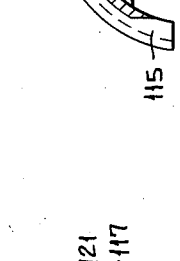


Fig-14

Fig-17

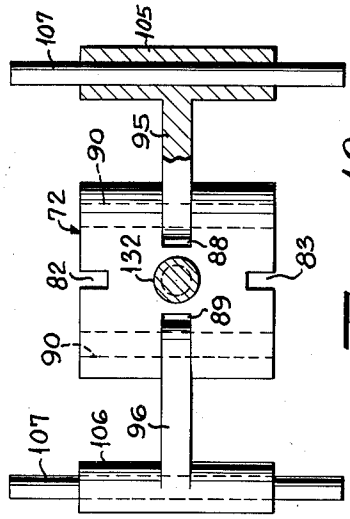


Fig-12

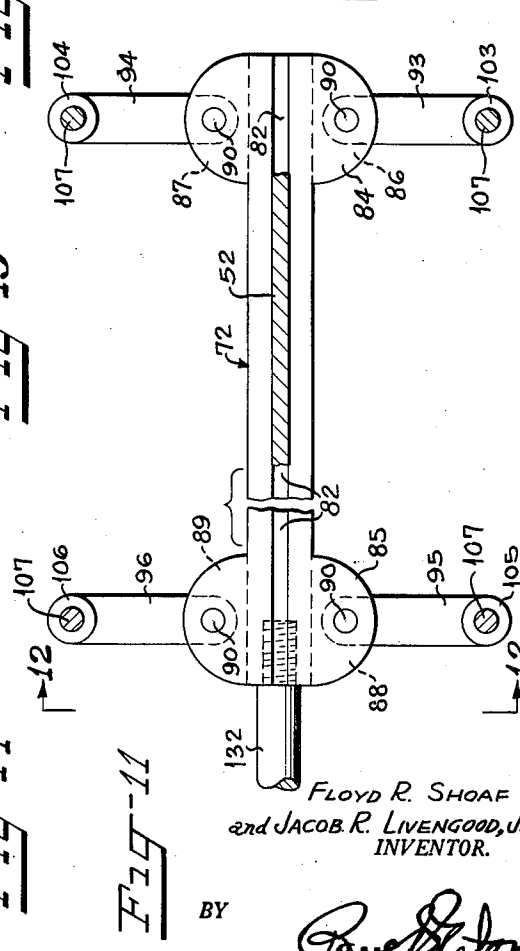


Fig-11

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ATTORNEY

Patented June 24, 1952

2,601,229

UNITED STATES PATENT OFFICE

2,601,229

HOSIERY INSPECTION AND MENDING FORM

Floyd R. Shoaf and Jacob R. Livengood, Jr., Concord, N. C.; said Livengood, Jr., assignor to said Shoaf

Application May 11, 1949, Serial No. 92,646

7 Claims. (Cl. 223—77)

1

This invention relates to an improved hosiery inspection and mending form and more especially to a form onto which a stocking may be placed for inspection purposes and having retractable portions extending substantially its entire length to provide for the use of the form in repairing runs, pull threads and the like while the stocking is mounted on the form.

It is an object of this invention to provide a hosiery inspection and repair form having a frame comprising a smooth rounded cap and a base portion between which a plurality of spaced ribs are disposed, the ribs and the base portions being substantially elliptical in shape. A plurality of substantially quarter-circular members are mounted for radial sliding movement between the ribs and the entire structure is preferably composed of a transparent plastic material, so that an operator may place a stocking over the form and the shape of the form conforms generally to the shape of the stocking to thus stretch the stocking taut when it is placed thereon for inspection purposes.

It is another object of this invention to provide a hosiery inspection and mending form of the type described with a rotatable base and means for mounting the rotatable base on a table or the like so the longitudinal axis of the stocking form extends in a horizontal plane and to provide manually operable means for retracting the quarter-circular members between the ribs of the form, after inspection of the stocking, for mending or repairing any runs, pull threads or the like which may have been discovered during the inspection of the stocking. Since the stocking form is rotatable, all sides of the stocking on the stocking form may be seen from a single point of observation.

It is another object of this invention to provide a hosiery inspection and mending form having a frame comprising a pair of longitudinally extending frame members to the upper and lower surfaces of which opposed ends of spaced semi-elliptical cross frame members are secured. The longitudinally extending frame members have an elliptically shaped conical member secured on one end thereof, representing the feeding end of the hosiery inspection and repair form and the other ends of the longitudinally extending frame members having tapering elliptically-shaped wall members secured thereto which are, in turn, secured to a plate or disk rotatable on a stub shaft and the stub shaft is connected to a housing having means for securing the same to a suitable table or the like. Slidably mounted between the

2

semi-elliptical cross frame members is a plurality of quarter-circular members which normally conform to the outer surfaces of the semi-elliptical frame members and means are slidably mounted between the longitudinally extending frame members and are connected to the quarter-circular members and have an extension thereon extending into the housing from which lever means extend to a suitable foot pedal for moving the quarter-circular members inwardly to thus provide a retracted surface between adjacent semi-elliptical frame members to provide space for a reciprocating run repair needle for repairing runs, and to provide slack for adjusting pull threads and the like.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds, when taken in connection with the accompanying drawings, in which—

Figure 1 is an end view of a hosiery inspection table showing the improved hosiery inspection and mending form mounted thereon;

Figure 2 is a top plan view of the hosiery inspection and mending form showing the same mounted on one end of a table and is taken looking down along the line 2—2 in Figure 1;

Figure 3 is an enlarged longitudinal vertical sectional view with parts broken away and is taken substantially along the line 3—3 in Figure 2;

Figure 4 is a vertical sectional view taken substantially along the line 4—4 in Figure 3;

Figure 5 is an enlarged vertical sectional view taken substantially along the line 5—5 in Figure 3 and showing the guide means for directing the quarter-circular members inwardly as will be required during a mending or repairing operation;

Figure 6 is an enlarged vertical sectional view taken substantially along the line 6—6 in Figure 3 and showing the manner in which the quarter-circular members are mounted for moving the same inwardly and outwardly with respect to each other;

Figure 7 is an enlarged elevation with parts in section, taken looking along the line 7—7 in Figure 3;

Figure 8 is an enlarged vertical sectional view taken along the line 8—8 in Figure 3 and showing the means for guiding the other ends of the retractable members inwardly with respect to each other;

Figure 9 is an enlarged vertical section view similar to Figure 6 but being taken along the line 9—9 in Figure 3 and showing the quarter-

circular retractable members in retracted position;

Figure 10 is an isometric view of one of the brackets for guiding the larger ends of the retractable members and showing it removed from the hosiery inspection and mending form;

Figure 11 is a top plan view of a longitudinally slidable member for controlling the inward and outward movement of the quarter-circular members and showing a portion of one of the guiding frame members in cross section as well as the pins which connect the member with the quarter-circular members and is taken substantially along the line 11—11 in Figure 3;

Figure 12 is an end elevation of the longitudinally slidable member with parts in cross section and is taken looking along the line 12—12 in Figure 11;

Figure 13 is an elevation looking at the inside of one of the retractable members removed from the hosiery inspection and mending form;

Figure 14 is an enlarged elevation looking at the left-hand end of the retractable member shown in Figure 13;

Figure 15 is an enlarged vertical sectional view taken along the line 15—15 in Figure 13;

Figure 16 is an enlarged vertical sectional view taken along the line 16—16 in Figure 13;

Figure 17 is an elevation looking at the right-hand end of the retractable member in Figure 13.

Referring more specifically to the drawings, the numeral 10 indicates one end of a hosiery inspection table of a type fabricated of sheet metal and having specially formed sheet metal legs 11 and 12 which are a usual part of inspection tables of this type. A cast housing 15 is secured as by bolts 16 to the table leg 11. This cast housing 15 supports the hosiery inspection and mending form broadly designated at 20.

The right-hand wall of the housing 15 in Figure 3 has a projection 21 on the inner face thereof and this wall and the projection 21 have a restricted threaded portion 22 of a stub shaft 23 threadably imbedded therein. The stub shaft 23 has a restricted portion 24 integral therewith on which the inner race of a ball bearing 25 is fixedly mounted. The inner race of the ball bearing 25 is secured on the restricted portion 24 of the shaft 23 by a suitable lock nut 26 threadably mounted on the right-hand end of the shaft 23.

The outer race of the ball bearing 25 has a disk 27 fixedly mounted thereon, as by a pressed fit and this disk 27 is also loosely penetrated by the shaft 23 (Figure 3). The disk 27 has a circular cavity 30 therein in which a second disk 31 is secured by any suitable means such as screws 32. The disk 31 also has a cavity 33 therein to provide clearance for the nut 26 and the end of the shaft 23 and this disk 31 also engages the outer race of the ball bearing 25 to secure the disk 27 on the bearing 25. The inspection form 20 has a frame comprising tapering semi-elliptical walls 34 and 35 which are identical, except being opposite hand. The tapering semi-elliptical walls 34 and 35 each have a flanged portion 36 integral therewith which is semi-circular in cross-section and the diameter of which is preferably the same as the large diameter of the semi-elliptical walls 34 and 35 (Figure 7) and is also the same diameter as disk 27 and is secured thereto as by screws 36–*a*.

The semi-elliptical members 34 and 35 are preferably of a molded transparent plastic material. It will be noted in Figures 5, 6 and 9, that diametrically opposed ends of the semi-elliptical walls 34 and 35 have longitudinally extending spars 37 and 38 and 39 and 40, respectively, integral therewith which are also molded integral with semi-elliptical conically-shaped walls 44 and 45 the right-hand ends in Figure 3 being smoothly rounded as at 43. It will be noted that the outer edges of the spars 37 to 40, inclusive are thicker than the inner edges thereof to permit inward movement of the quarter-circular members 110, to be later described.

A plurality of spaced substantially semi-elliptical ribs 46 are molded at diametrically opposed ends thereof integral with the spars 37 and 38 and similar semi-elliptical ribs 47 are molded at diametrically opposed ends thereof integral with the spars 39 and 40. The endmost ribs 46 and 47 are also spaced apart from the semi-elliptical wall members 34 and 35 and the semi-elliptical conically-shaped wall members 44 and 45. It will be noted in Figures 1, 2 and 3 that the semi-elliptical ribs 46 and 47 diminish in size from left to right to conform to the taper of the semi-elliptical walls 34 and 35 and to also conform to the shape of the walls 44 and 45 at the right-hand end of the form 20 in Figures 1, 2 and 3.

The longitudinally extending spars 37 and 38, which are integral with the ribs 46 and the tapering walls 34 and the conically-shaped portion 44, are secured to the longitudinally extending spars 39 and 40, respectively, as by screws 50 (Figure 6) thus securing the upper half of the form frame 20 to the lower half thereof as shown in Figure 3.

Before the upper half of the form 20 is secured to the lower half thereof as shown in Figure 3, longitudinally extending guide members 52 and 53 are adhesively secured to the inner surfaces of the semi-elliptical tapering walls 34 and 35 and also to the proximate surfaces of the ribs 46 and 47, respectively, and extend along the small radius of the ellipse formed thereby. It will be noted in Figures 3, 5, 6, 7 and 9 that the proximate edges of the longitudinally extending guide members 52 and 53 are spaced apart from each other and extend in parallel relation to each other throughout the length of the form 20 while their remote edges are tapered or converge from left to right in Figure 3 to conform to the inner surfaces of the semi-elliptical ribs 46 and 47. The right-hand ends of the guide members 52 and 53 terminate at the left-hand edges of the members 44 and 45, respectively, and are molded integral with an end portion 55 which is substantially elliptical in shape, as shown in Figure 8, and which is adapted to engage the inner surfaces of the members 44 and 45 in Figure 3. The left-hand ends of the longitudinally extending guide members 52 and 53 in Figure 3 are molded integral with a plate 56 (Figures 3 and 7) which is also substantially elliptical in shape and conforms to the inner surfaces of the tapering walls 34 and 35.

In Figures 3, 5 and 10 there are shown guide brackets 60 and 61 both of which are identical, except being opposite hand. The guide brackets 60 and 61 are secured to opposed sides of the longitudinally extending guide members 52 and 53 at the right-hand end of the tapering walls 34 and 35 in Figure 3, as by screws 62, which slidably penetrate the bracket 60 and the mem-

bers 52 and 53 are threadably imbedded in the bracket 61 as shown in Figure 5. The brackets 60 and 61 are provided with inwardly converging slots 64 and 65 and 66 and 67, respectively, (Figure 5) in which slidable guide members are adapted to be mounted, these guide members being integral parts of retractable quarter-circular members to be later described.

The guide brackets 60 and 61 are provided with coinciding notches 70 and 71, respectively, on the proximate edges thereof, which, when the brackets 60 and 61 are assembled with the guide members 52 and 53, provide an opening through which a longitudinally extending slidable member broadly designated at 72 (Figures 5, 11 and 12) may be inserted, and which will be later described in detail.

The end member 55 at the right-hand end of the guide members 52 and 53 in Figure 3 also has inwardly converging slots 74, 75, 76 and 77 which, although they are spaced relatively closer together, coincide with the slots 64 to 67, inclusive, in the brackets 60 and 61 and are provided for the same purpose.

The peripheral edges of the brackets 60 and 61 as well as the end plate 56 conform to the shape of the semi-elliptical tapering walls 34 and 35 and are adapted to be adhesively secured to the inner surfaces thereof when the longitudinally extending guide members 52 and 53 are inserted in the upper and lower halves of the form 20.

Referring to Figures 3 and 7, it may be observed that the end plate 56 also has a substantially rectangular opening 80 therein and it will be noted in Figures 5 and 7 that the proximate portions of the longitudinally extending guide members 52 and 53 extend a substantial distance into the opening 80 and the opening defined by the notches 70 and 71 in the brackets 60 and 61, respectively.

Before the upper and lower halves of the frame 20 are secured to the disk 27 by the screws 36–*a*, the longitudinally movable block 72 is inserted through the opening 80 and this block 72 has longitudinally extending slots 82 and 83 cut in its upper and lower surfaces which are slidably engaged by the proximate portions of the longitudinally extending guide members 52 and 53 as the block 72 is inserted through the opening 80 in the plate 56 and through the opening defined by the notches 70 and 71 in the brackets 60 and 61, respectively.

Referring to Figures 11 and 12, it may be observed that the longitudinally movable block 72 has enlarged rounded end portions 84 and 85 integral therewith, opposed sides of which are provided with notches or slots 86 and 87, and 88 and 89, respectively. Links 93 to 96, inclusive are oscillatably mounted in the slots 86 to 89, inclusive, respectively, as at 90.

The links 93 to 96 extend outwardly and have transverse vertically disposed portions 103 to 106, respectively, integral therewith in each of which a vertically disposed pin 107 may be slidably mounted, or, if desired, these pins 107 may be secured in the transverse portions 103 to 106, inclusive, as by a pressed fit. The pins 107 extend beyond the upper and lower ends of the transverse portions 103 to 106, inclusive of the links 93 to 96, inclusive, respectively, and their ends are connected to molded quarter-circular retractable wall members 110, 110–*a*, 110–*b* and 110–*c* in a manner to be presently described. These quarter-circular members may be of metal,

wood, composition, or plastic material, but it is preferred that they be of a transparent plastic material.

The quarter-circular retractable wall members 110, 110–*a*, 110–*b*, and 110–*c* are identical except the quarter-circular members 110–*b* and 110–*c* are opposite hand from the quarter-circular members 110 and 110–*a*. Therefore, only the quarter-circular member 110 will be described in detail and like reference characters will apply to the members 110–*a*, 110–*b* and 110–*c*. This member 110 is clearly shown in Figures 13, 14, 15, 16 and 17. The quarter-circular retractable wall member 110 has substantially quarter-circular segmental end walls 112 and 113 molded integral therewith, the end wall 113 being of a substantially larger radius than the end wall 112 and the quarter-circular walls 110 extending therebetween gradually increasing in size from right to left in Figure 13 to conform to the gradually increasing size of the ribs 46 and 47 from right to left in Figures 2 and 3 so the quarter-circular members 110, 110–*a*, 110–*b* and 110–*c*, when mounted between the ribs 46 and 47, in a manner to be presently described, will provide a smoothly tapering effect to the hosiery inspection and mending or repair form 20.

Referring to Figure 13, it may be observed that the longitudinally extending quarter-circular member 110 has a plurality of spaced quarter-circular grooves 115 formed in its periphery and when the member 110 is mounted in the form 20, these grooves 115 aline with the ribs 46 and 47 and have sliding movement relative to the same as will be later described. The quarter-circular member 110 also has a pair of inwardly projecting portions 116 and 117, which are also molded integral therewith, and the inner or front and bottom surfaces in Figure 13 of which are perpendicular to each other and the bottom surface of which terminates a substantial distance above the lower edge of the quarter-circular member 110.

Referring to Figures 15 and 16, it will be observed that the lower surfaces of the inwardly projecting portions 116 and 117 have vertically disposed bores 120 and 121 therein, respectively, which, when the quarter-circular members 110, 110–*a*, 110–*b* and 110–*c* are assembled as shown in Figure 6, are adapted to slidably receive opposed ends of the pins 107 heretofore described.

The end wall 112 (Figures 13 and 17) has a pin 123 extending outwardly therefrom and the end wall 113 at the left-hand end of Figure 13 has a substantially rectangular projection 124 molded integral therewith and it will be noted in Figure 14 that the upper and lower surfaces of this projection 124 are parallel but are disposed at an angle relative to the horizontal axis of the semi-circular end wall 113. The angularity of this projection 124 conforms to the angularity of the slots 64 to 67, inclusive, in the brackets 60 and 61 and also conforms to the angularity of the upper and lower remote surfaces of the longitudinally extending spars 37 to 40, inclusive.

It has already been stated how the block 72 is mounted for longitudinal sliding movement on the guide members 52 and 53, the reason for which will be later described. Now, in order to move the member 72 back and forth along the guideways 52 and 53, one end of a rod 132 is threadably imbedded in the left-hand end of the guide block 72 in Figures 3 and 11 and it will be noted in Figure 3 that this rod 132 extends to the left and slidably penetrates the shaft 23

along its axis and also slidably penetrates the projection 21 in the housing 15. The rod 132 then slidably penetrates a block 133 and has suitable collars 134 and 135 adjustably secured thereon and engaging opposed sides of the block 133.

The block 133 has spaced depending ears 140 integral therewith between which the upper end of a projecting portion 141 of a tubular shaft 142 is slidably mounted. This upwardly projecting portion 141 has a slot 143 therein (Figures 3 and 4) which is slidably penetrated by a pin 144 fixedly mounted in the downwardly projecting ears 140 of the block 133.

It will be noted in Figure 4 that opposed ends of the tubular shaft 142 slidably engage proximate surfaces of the side walls of the housing 15 and this tubular shaft 142 is oscillatably mounted on a solid shaft 150 threadably imbedded in one of the walls of the housing 15 and slidably penetrating the opposite wall of the housing 15.

The tubular shaft 142 also has an inwardly projecting portion 151 integral therewith to the upper end of which a vertically disposed link 152 is pivotally connected, as at 153 (Figure 3). The lower end of the link 152, in Figure 1, is pivotally connected, as at 155 to the left-hand end of a treadle bar 156 oscillatably mounted as at 157 on a bracket 160 secured, as by screws 161, to the conventional leg 11 of the work table 10.

The treadle bar 156 is normally urged in a counterclockwise direction in Figure 1 by a tension spring 162, opposed ends of which are connected to the bar 156 as at 163 and to the table leg 11 as at 164. The bar 156 also has welded to the upper right-hand surface thereof in Figure 1 a foot pedal 165 which is adapted to be engaged by the foot of an operator for retracting the semi-circular members 110, 110–*a*, 110–*b* and 110–*c* in the manner to be later described.

In order to assemble the hosiery inspection and mending form 20 as shown in Figures 1, 2 and 3, the longitudinally extending and movable block 72 must be mounted on the guide members 52 and 53 in the manner heretofore described, then the pins 107 in the links 93 and 94 are inserted in the bores 120 in the semi-circular members 110, 110–*a*, 110–*b* and 110–*c* while the pins 107 in the links 95 and 96 are inserted in the bores 121 in the manner shown in Figures 6 and 9.

At the same time that the pins 107 are inserted in the bores 120 and 121, the pins 123 at the small end of the semi-circular members 110 to 110–*c* inclusive are inserted in the corresponding slots 74 to 77, inclusive, as shown in Figure 8 and the projections 124 on the large end of the members 110 to 110–*c*, inclusive, are inserted in the slots 64 to 67, inclusive, as shown in Figure 5.

The longitudinally extending spars 37, 38, 39 and 40 of the upper and lower halves of the form 20 are then secured together by the screws 50 with the end walls 112 and 113 of the semi-circular wall members 110 to 110–*c*, inclusive slidably engaging the proximate surfaces of the wall member 55 and the brackets 60 and 61 while the ribs 46 and 47 are slidably inserted in the grooves 115 in each of the members 110 to 110–*c*, inclusive. The semi-circular flange portions 36 of the upper and lower semi-elliptical walls 34 and 35 are then secured to the disk 27 by the screws 36–*a* in the manner heretofore described.

Before placing the stocking on the form the members 110 are retracted to the position shown in Figure 9. The position of the block 72 is then adjusted so the outer surfaces of the quarter-circular members 110 to 110–*c*, inclusive, are flush with the outer surfaces of the ribs 46 and 47 which is done by adjusting the collars 134 and 135 along the connecting rod 132 (Figure 3). The stocking is then inspected while rotating the form on its longitudinal axis.

It might be stated that the connecting rod 132 must also rotate in the block 133 and relative to the shaft 23 and the projection 21 of the housing 15 when the form 20 is rotated during the inspection of the stocking mounted thereon.

If, upon inspecting the stocking, it is found necessary to repair the same in one way or another, the operator then moves the treadle bar 156 in a clockwise direction in Figure 1 which will cause the connecting rod 152 to move upwardly and will thus move the shaft 142 in a counterclockwise direction in Figure 3, which will, in turn, cause the shaft 132 to move from right to left in Figure 3. As the shaft 132 moves from right to left in Figure 3, the moveable bar 72 will also move from right to left and, in so doing, will cause the transverse portions 103 to 106, inclusive, of the links 93 to 96, inclusive, to move inwardly with respect to each other thus moving the pins 107 inwardly and causing the semi-circular members 110 to 110–*c* to move inwardly from the position shown in Figure 6 to substantially the position shown in Figure 9.

The stocking will still remain taut due to the ribs 46 and 47 engaging the same, however, the portions of the stocking disposed between the ribs 46 and 47 will be free of the quarter-circular members 110 to 110–*c* and thus a needle or the like may be passed in and out through the stocking for repairing the same.

After the stocking has been inspected, and repaired if necessary, it is removed from the form preferably while the members 110, 110–*a*, 110–*b* and 110–*c* are flush with the ribs 46 and 47 or in the position shown in all of the drawings except Figure 9, which will present a smooth surface for the stockings to allow easy removal of the same.

It is thus seen that we have provided a hosiery inspection and mending form which may be mounted on a horizontal axis and having a frame comprising a plurality of spaced ribs between which retractable members are mounted, the retractable members conforming to the outer surfaces of the ribs so that a stocking may be placed on the form and inspected and we have further provided means whereby the retractable members between the ribs may be retracted by manually operable means disposed remotely from the hosiery inspection form so an operator may repair the stocking without the necessity of removing the stocking from the form.

In the drawings and specification there has been set forth a preferred embodiment of the invention, and although specific terms are employed, they are used in a generic and descriptive sense only, and not for purposes of limitation, the scope of the invention being defined in the claims.

We claim:

1. A hosiery inspection and repair form coming a substantially elliptically-shaped tubular portion, longitudinally extending spars connected to diametrically opposed sides of the elliptically-shaped tubular portion at one edge thereof, a conical portion substantially elliptical in cross section connected to the other end of the longi-

tudinally extending spars, a plurality of spaced ribs semi-elliptical in shape and being disposed transversely of the axis of the form and mounted between the tubular portion and the conical portion, a plurality of quarter-circular movable members conforming to the outer peripheral edges of the ribs and also conforming to the outer peripheral surfaces of the tubular portion and the conical portion and being mounted inside of and extending between the said ribs and being radially movable relative to said ribs, whereby a stocking may be placed over the ribs and quarter-circular members for inspection purposes.

2. In a structure according to claim 1, means disposed within the ribs and connected to the quarter-circular members and having operating means exteriorly of the form connected thereto for retracting the quarter-circular members so their outer edges are disposed inwardly of the outer edges of the ribs for repairing the stocking while mounted on the frame.

3. A hosiery inspection and mending form comprising a housing adapted to be mounted on a table and the like, means for securing the housing to one of the legs of said table, a stub shaft extending horizontally from said housing, a disk rotatably mounted on said stub shaft on a horizontal axis, a pair of substantially semi-elliptical wall members, means securing said semi-elliptical wall members to the disk, longitudinally extending spars integral with the ends of said semi-elliptical wall members remote from the disk and being positioned diametrically opposite from each other, semi-conical members molded integral with said spars and being connected to the free ends thereof and forming a conical member, said conical member being substantially elliptical in cross section at its largest end and being split along its large diameter, and said end of the conical member being of substantially smaller dimensions than the elliptically shaped wall members, a plurality of spaced substantially semi-elliptical ribs extending transversely of the axis of said form and being molded integral with said spars and also decreasing in size from said semi-elliptical walls to the conical member, a plurality of quarter-circular members of transparent plastic material mounted inside of and extending between said ribs and being radially movable relative to said ribs, the outer surfaces of the quarter-circular members normally conforming to the outer surfaces of the semi-elliptical walls and the semi-elliptical ribs throughout the length of the form, whereby a stocking may be placed on the form and said form may be manually rotated on its longitudinal axis for inspection purposes.

4. In a structure according to claim 3, means disposed within the ribs and connected to the quarter-circular members and having operating means exteriorly of the form connected thereto for retracting said quarter-circular wall members relative to the semi-elliptical wall members and the semi-elliptical ribs to move them out of contact with the stocking for repairing said stocking while on the form.

5. In a structure according to claim 4, said means for retracting the quarter-circular walls comprising a longitudinally movable block and means for slidably supporting said longitudinally movable block within the confines of the semi-elliptical rib members, a plurality of links pivotally connected to opposed sides of said longitudinally movable block and means pivotally connecting the outer ends of said links to the quarter-circular wall members, a longitudinally extending shaft fixedly connected at one end to the longitudinally movable block, the free end extending through said disk, and manually operable means connecting to the free end of said shaft for transmitting longitudinal movement to the shaft and thus to the longitudinally movable block fixedly connected thereto, whereby upon said block being moved in one direction, the outer ends of the links will be caused to move inwardly toward each other, thus causing the quarter-circular wall members, being pivotally connected to the outer ends of said links, to move inwardly with respect to each other.

6. A hosiery inspection and repair form having upper and lower longitudinally extending frames, each of the frames comprising a substantially semi-elliptically-shaped and slightly tapering end wall portion and a semi-elliptical tapering conical end wall portion spaced apart from the semi-elliptical wall portion, said upper and lower frames each having a plurality of coinciding semi-elliptical transverse ribs spaced apart from each other and gradually decreasing in size from adjacent the semi-elliptical wall portions to the semi-elliptical conical wall portions and the upper and lower frames each having longitudinally extending spars connected at opposed ends thereof to the diametrically opposed end portions of the semi-elliptical walls and the semi-elliptical conical walls, longitudinally extending quarter-circular wall members having spaced radially extending notches in their outer periphery, the quarter-circular wall members being mounted within the transverse ribs for substantially radial sliding movement relative to the ribs to where the outer peripheries of their wall portions normally occupy the same longitudinal plane as the outer peripheral edges of the rib members and the conical wall members and the semi-elliptical wall members and the walls of the notches in the quarter-circular members being adapted to slidably engage the side edges of the rib members, the said quarter-circular members being adapted to slidably engage the remote surfaces of the longitudinally extending spars whereby a stocking may be placed on the form for inspection purposes.

7. In a structure according to claim 6, means disposed within the ribs and connected to the quarter-circular members and having operating means exteriorly of the form connected thereto for retracting the quarter-circular members relative to the elliptical walls and the ribs to thus move their outer surfaces out of the longitudinal plane of the ribs and the semi-elliptical walls for repairing the stocking mounted thereon.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,023,946	Ammon	Dec. 10, 1935
2,363,380	Ammon	Nov. 21, 1944