April 15, 1930. M. M. IVEY 1,754,558

DOLL

Filed Nov. 4, 1927 3 Sheets-Sheet 1

Fig. 1.

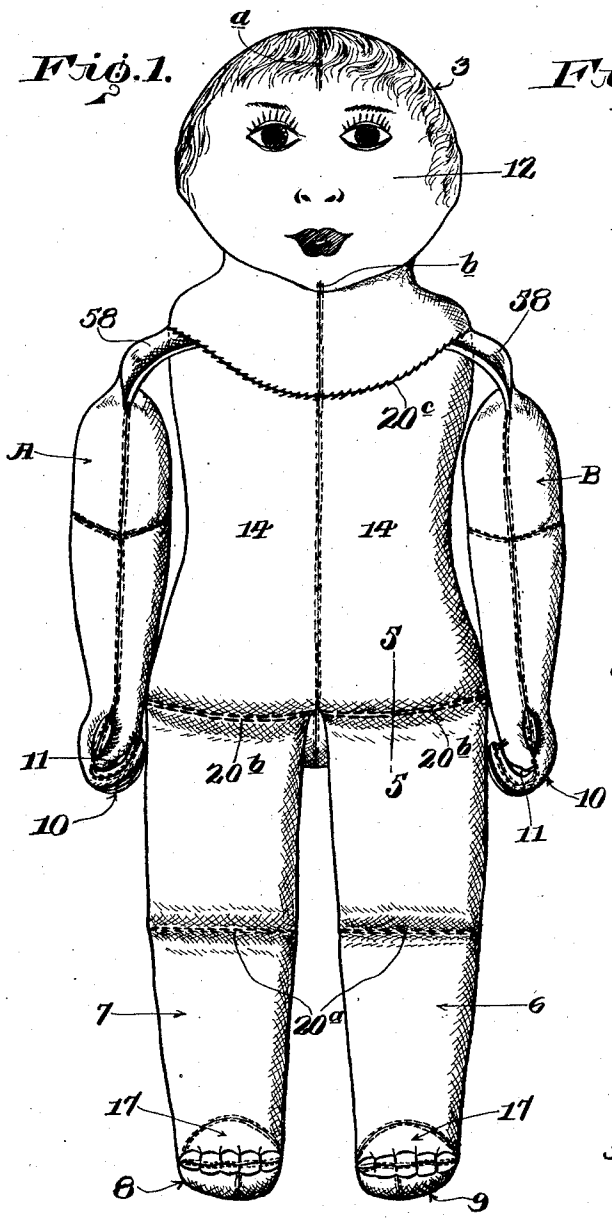


Fig. 3.

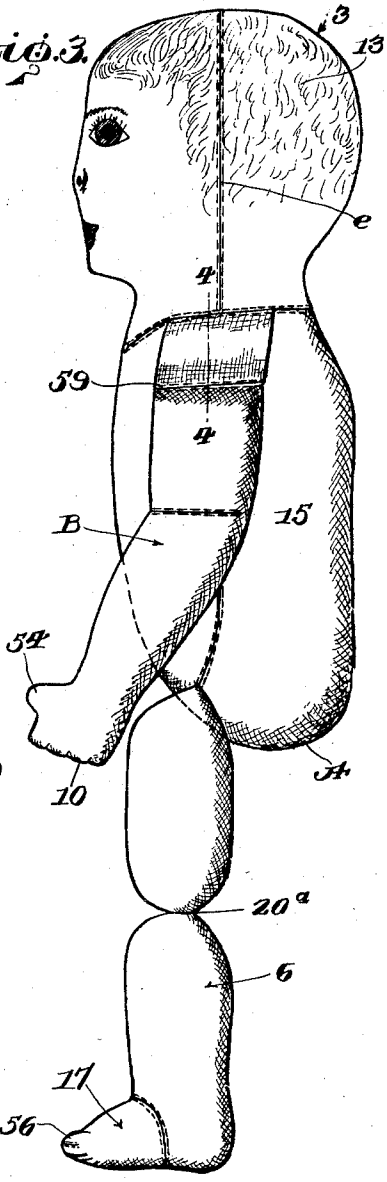
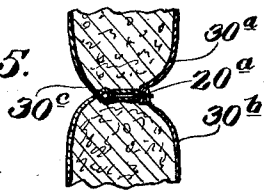


Fig. 15.



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DOLL

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Fig. 2.

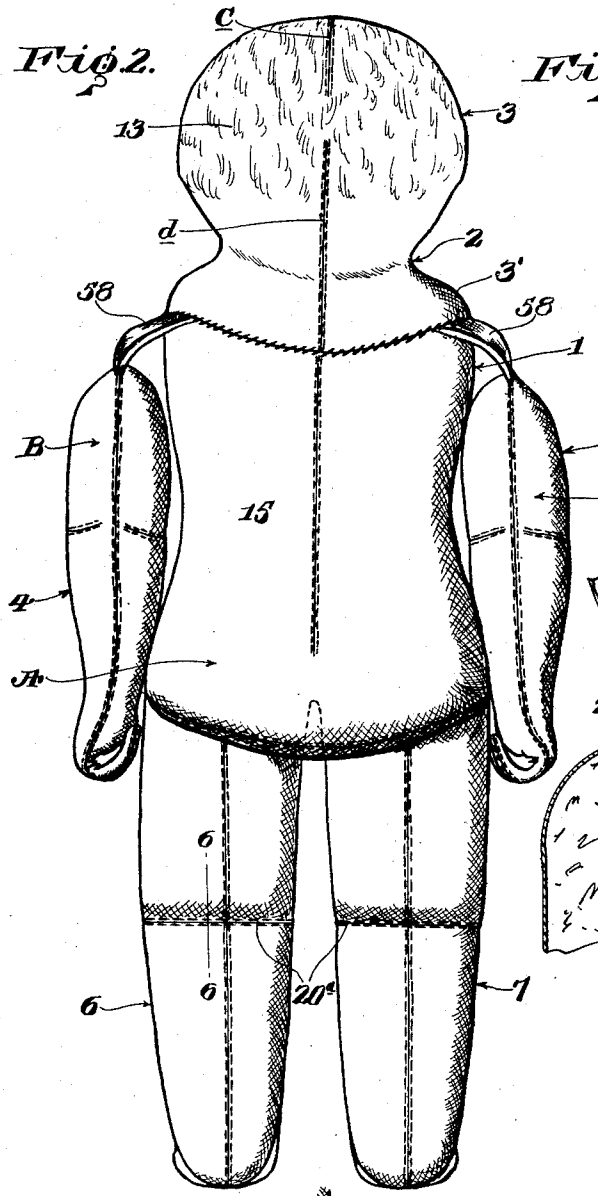


Fig. 4.

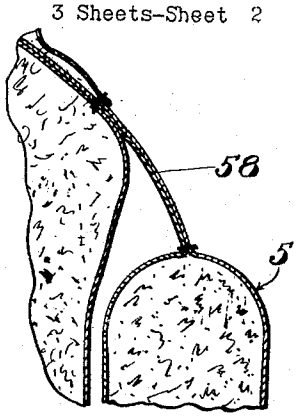


Fig. 5.

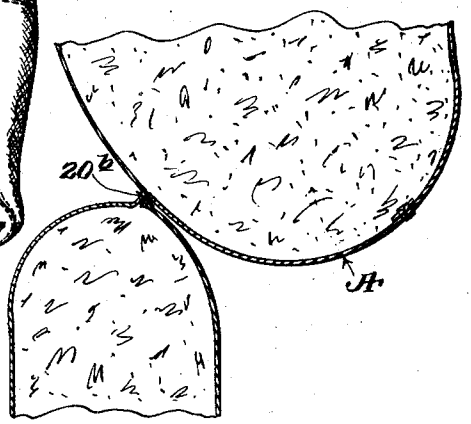


Fig. 6.

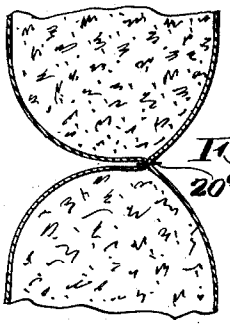
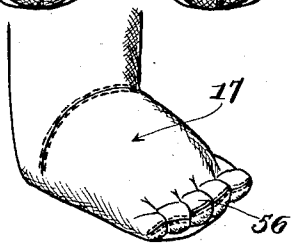


Fig. 7.



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DOLL

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Fig. 9.

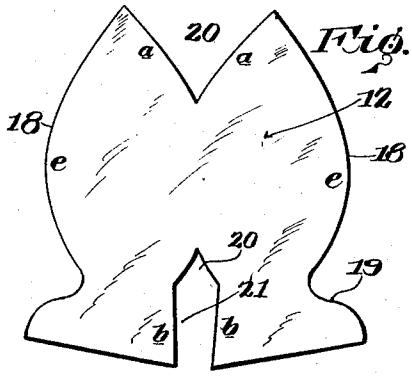
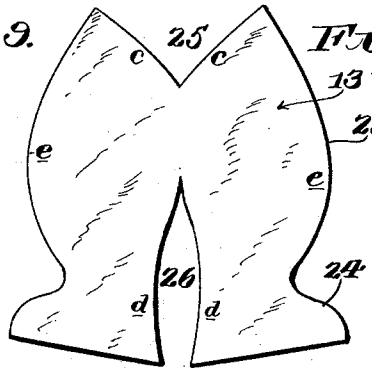


Fig. 10.



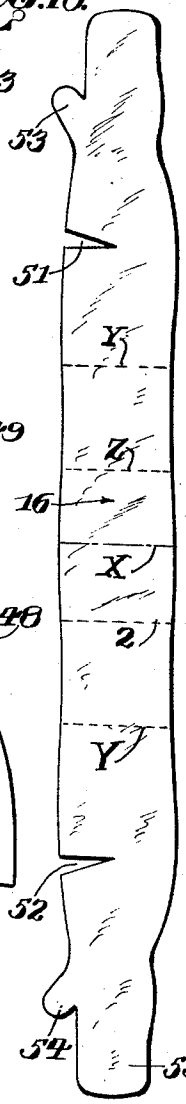


Fig. 13.

Fig. 11.

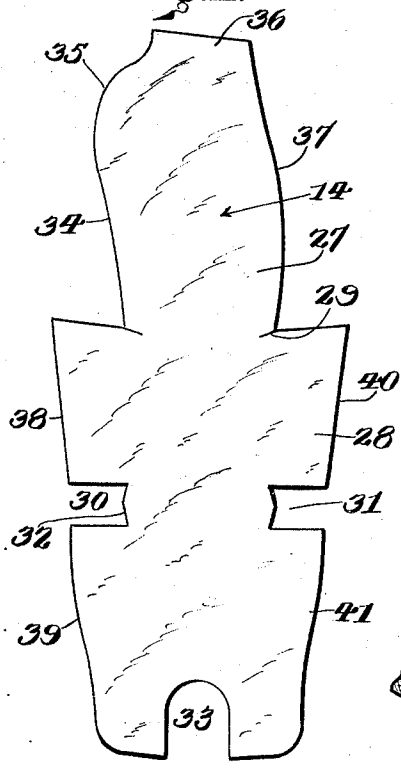


Fig. 12.

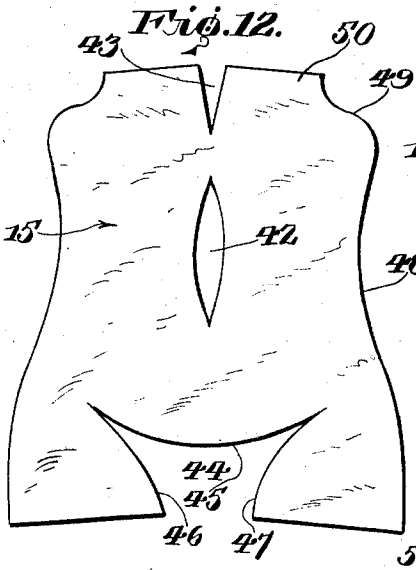


Fig. 8.

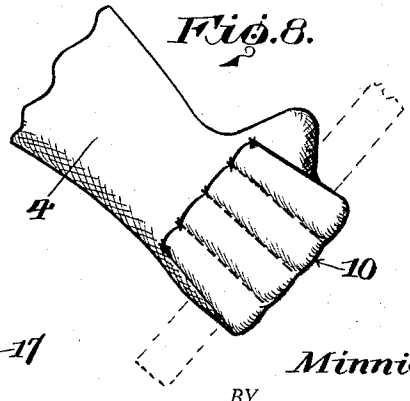
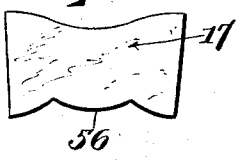


Fig. 14.



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Patented Apr. 15, 1930 1,754,558

UNITED STATES PATENT OFFICE

MINNIE M. IVEY, OF VALDOSTA, GEORGIA

DOLL

Application filed November 4, 1927. Serial No. 231,103.

This invention relates to dolls of the soft stuffed type, and has for its object to provide, in a manner as hereinafter set forth, a doll of such type including a casing formed of a series of sections so shaped and secured together in a manner relative to each other whereby when the casing is stuffed to provide the doll body the latter will possess the characteristics of either a firm rigid neck or a bobbing head with a loose neck, hands, the posture of sitting alone, on knees, on head, with trunk erect, holding articles in hand, capable of being arranged in creeping position on hands and knees, enabling the arms to be crossed at the back of the head, permitting of the arms being balanced on horizontal lines with shoulders as if expecting to be taken, and other postures.

A further object of the invention is to provide, in a manner as hereinafter set forth, a doll having the arms thereof capable of being freely moved and assisting in balancing posture.

A further object of the invention is to provide, in a manner as hereinafter set forth, a doll having the hands thereof doubled up to provide an opening for the reception of articles to be held by the hands.

With the foregoing and other objects in view the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Figure 1 is a front elevation of a doll in accordance with this invention.

Figure 2 is a rear elevation thereof.

Figure 3 is a side elevation.

Figure 4 is a section on line 4—4 Figure 3.

Figure 5 is a section on line 5—5 Figure 1.

Figure 6 is a section on line 6—6 Figure 2.

Figure 7 is a fragmentary view illustrating one of the feet of the doll.

Figure 8 is a fragmentary view illustrating one of the hands of the doll.

Figures 9 and 10 are elevations respectively of the front and rear sections of that part of the casing providing the head of the doll body, and further forming the neck and shoulders of the latter.

Figure 11 is an elevation illustrating one of the sections of the pair of front sections of the trunk.

Figure 12 is an elevation illustrating the back section of the trunk.

Figure 13 is an elevation illustrating one of the sections of the pair of arm sections.

Figure 14 is an elevation of one of the sections of the pair of foot sections.

Figure 15 is a fragmentary view in vertical section of a modified form.

A doll body, in accordance with this invention, comprises a trunk 1, neck 2, head 3, shoulders 3′, arms 4, 5, legs 6, 7 and feet 8, 9. Each arm is formed with a doubled-up hand 10, which provides an opening 11 for the reception of an article to hold the same. The doll body is of the soft stuffed type.

The doll body is constructed from a series of flexible sections secured together to provide three hollow casings containing a stuffing. The sections are nine in number.

The head, neck and shoulders of the doll body are formed from front and back sections 12, 13 respectively. The trunk and the legs of the doll body are formed from a pair of like sections 14, and a section 15. The sections 14 are oppositely disposed with respect to each other and provide the front of the trunk and the pair of legs. The section 15 provides the back of the trunk. The arms are formed from a pair of superposed sections 16 of like construction. The feet are formed from a pair of sections 17 of like construction. The sections 12, 13, 14, 15 and 17 provide the casing A and the sections 16 the casings B and C. The casings B and C are coupled together and secured to casing A.

Each of the sections is constructed of any suitable material and preferably cut from a sheet of material lengthwise of the weave thereof.

The section 12 has the major portion of

each side edge thereof of convex curvature as indicated at 18 and the remaining portion, indicated at 19, is of ogee curvature and directed outwardly whereby the lower part of the portion 19 will project beyond the portion 18 of the edge. The section 12 at its top has a V-shaped cutout portion or dart 20 and centrally of its bottom a lengthwise extending cutout portion 21 is formed having the inner part of inverted V-shape as indicated at 22. The bottom edge of the section 12, from the cutout portion 21 inclines upwardly towards the side edges of the section.

The section 13 has the major portion of each side edge thereof, as indicated at 23 of convex curvature and the remaining portion thereof, as indicated at 24 of ogee curvature and which is directed outwardly so as to project beyond the portion 23 of the edge. The upper part of the section 13 is formed with a V-shaped cutout portion or dart 25 and said section 13 is formed at its center and extending lengthwise thereof, as well as opening at the bottom edge of the section, with an arrow shaped cutout portion 26 of greater length than the length of the cutout portion 21 of the section 12. The bottom edge of the section 13 inclines upwardly from the cutout portion 26 to the side edges of said section.

Each section 14 comprises an upper part 27 and a lower part 28 of greater width than the upper part 27 and at the junction of the part 27 with the part 28 a pair of oppositely extending downwardly inclined slits 29 are formed. The part 28 tapers from its lower to its upper end and said part 28 intermediate its end is formed with a pair of oppositely extending cutout portions 30, 31 each having the inner edge thereof inclining in opposite directions as indicated at 32. The bottom of the part 28, centrally thereof is formed with a semi-oval shaped opening 33. The part 27 has a portion of one edge thereof, indicated at 34 inclining forwardly with respect to the part 28 and said part 34 terminates in a part 35 of ogee curvature which has the upper portion thereof directed inwardly, or in other words arranged rearwardly with respect to the lower portion thereof whereby the upper end 36 of the part 27 is of less width than the lower portion of said part 27. The other edge of the part 27 is upon a slight compound curve throughout and said edge is indicated at 37. The forward edge of the part 28 above the opening 30 and which is indicated at 38 extends at a forward inclination from its lower end and that part of the forward edge of the part 28, below the opening 30 and which is indicated at 39 is upon a slight compound curve. That part of the rear edge of the part 28, above the opening 31 and which is indicated at 40 extends at a rearward inclination from its lower end and that part of the rear edge of the part 28, which is arranged below the opening 31 and which is indicated at 41 is upon a slight compound curve.

The section 15 is provided, lengthwise thereof, and intermediate its ends with an elliptical shaped opening 42 and above and in alignment with respect to said opening with a V-shaped cutout portion or dart 43. The lower part of the section 15 is formed with a cutout portion 44 having a curved top edge 45 and curved side edges 46, 47 and with said edges 46, 47 directed towards each other. The major part of each side edge of the section 15 and which is indicated at 48 is upon a compound curve and said part 48 terminates at its upper end into an inwardly directed part 49 of ogee curvature. The parts 49 of the side edges of the section 15 reduce the width of the upper portion of the section 15 and such part of reduced width is indicated at 50. The top edge of the section 15 extends downwardly in an opposite direction from the cutout portion 43 and the bottom edge of said section 15 extends at an upward inclination in opposite directions from the side edges of said section.

Each section 16 is formed at one of its side edges with a pair of spaced V-shaped cutout portions or darts 51, 52 which are disposed transversely and between the dart 51 and one end of said section 16 an inclined rounded extension 53 is arranged and between the dart 52 and the other end of the section 16 a rounded inclined extension 54 is provided. The extensions 53, 54 extend at opposite inclinations with respect to each other. That part of the section 16 outwardly with respect to each extension is of less width than the remaining part of the section and the portions of less width are indicated at 55. The side edges of the section 16 are of slightly waved curvature.

Each section 17 has a substantially corrugated or scalloped lower edge 56 and a substantially concavo-convex upper edge 57. The side edges of each section 17 extend at a slight outward inclination.

The section 12 provides for the front of the head, chest or breast part and shoulder part, the shoulder part being one-sixth broader than the broadest part of head. The cutout portion 20 forms two acuate angular parts that end at a point for the hair to begin on forehead, and further forms a rounded forehead. The cutout portion 21 provides for the chin and neck indenture.

Section 13 forms the back of the head, neck and shoulder. The cutout portion 25 forms two acute angular shaped pieces that come together and form the top of the head, more or less flat, with front angles. The cutout portion 26 in neck is wider at neck indenture than elsewhere and ends at base of head in a point.

The sections 16 are to be secured together in a manner to be referred to to provide the

casings B and C adapted to be stuffed to form the arms and hands. When finished they reach to the bottom of the buttocks. The dotted line X, Figure 13 indicates where the sections 16 are to be positioned with respect to the front seam of the body of the doll or trunk. The dotted lines Y, Figure 13 indicate where the stuffing stops and where the sections are transversely stitched together to form casings B and C. The dotted lines Z indicate where sections 16 are to be secured and stitched to the trunk. The cutout portions 51, 52 when stitched together at elbow line give natural curve in arms that curve towards front and the arms are in alignment with the legs.

The sections 14 provide the front portion of the trunk, and also the legs, heels and ankles.

The section 15 provides the back of the trunk and curves for the shoulders. The cutout portion 43 forms the indentation at the back of neck. The cutout portion 44 forms the indentation in the small of the back. The opening 42 provides for the buttocks and the bottom of the trunk.

The sections 17 form top and bottom of feet having parts joining the inside part of the ankle and curving inward towards little toe, or on outside of the feet at the end.

When constructing the doll, the section 12 is closed by sewing on line designated *a*—*a* and extending stitching to end of forehead where hair begins. The section 12 is further closed by sewing on line designated *b*. After the closing of section 12 in the manner as stated, then section 13 is closed by sewing on line *c* and on line *d*. Or in other words the edges of the cutout portion 21, with respect to Figure 12 and the edges of the cutout portion 25, as well as the edges of the cutout portion 26 are secured together with respect to section 13. After the openings 20, 21, 25 and 26 are closed, the sections 12 and 13 are secured together upon lines designated *e* but when said sections are stitched together, the bottom thereof is left open for joining to the trunk. After the sections 12 and 13 are secured together the operator stuffs the top, back and front of head and the neck.

After the foregoing operation with respect to the head sections has been carried out, the sections 16 are secured together and stuffed to provide the arms and hands. The arms and hands are formed by the casings B and C. The darts 51, 52 of each section are closed so as to give natural curve in elbow. The extensions 53, 54 of the sections provide the thumbs. The sections 16 are secured together at the edges to the extent to leave an opening for stuffing. The stuffing is then inserted and the finger part stuffed limply. The fingers are braced by either machine stitch or hand stitch. Next the thumbs, hands and arms are stuffed to and above the elbows to points substantial distances from the central dotted line. The opening at the edges is then closed. The sections 16 are then pressed down and stitched transversely, as at 59 and as near to the stuffing as is possible to provide casings B and C, and thus leave a flat, limp coupling portion between the transverse stitchings 59 for the arms.

After the arms and hands have been formed in the manner as stated, the sections 16 are then operated on. With respect to each section 16 the openings 30, 31 are closed. Then a section 17 is secured to the edges of the opening 33 after which the side edges of the part 28 are secured together. The toe casing is then flattened out and opening 33 closed. After this operation the edge 37 of the part 27 of one section 14 is secured to edge 37 of the part 27 of the other section and which provides the front of the trunk.

After sections 14 have been operated upon in the manner as stated the openings 43 and 42 of section 15 are closed. The edges 46 and 47 are then secured together. Now fit to circular shape buttocks and secure edge 45 to edges 46, 47. The side edges of the section 15 are then secured to the free edges of sections 14, or in other words the free edges of the parts 27 of the sections 14 are secured to the side edges of the section 15 on wrong side. Now turn the trunk, legs and feet and stitch to bottom back with edges down just above the top leg.

Begin stuffing at toes. Stuff limply and form toes with four overcasting stitches, stitching with hands, or tracing with machine, the latter process more difficult. Now stuff foot and leg to knee line and stitch leg parts through center thereof as at 20^a. This gives proper freedom of knee bending. Then stuff upper portion of leg parts. Then press ends of back extension legs down and sew through as at 20^b, Figure 1, thus leaving all weight of legs on front casing. Then stuff trunk beginning at bottom and stuff to top, thus completely making all parts of the doll.

The rows of stitching 20^b are at the points of connection between the legs and the lower end of the front of the trunk whereby the bottom of the trunk, as an entirety will project rearwardly from such points of connection and the upper ends of the legs. The points of connection between the legs and the trunk are flexible.

Now position portion 58 across top of trunk between the center seam at front and back of trunk. Then place head, breast and neck part over portion 58 and sew around same through trunk at line 20^c to connect sections 12, 13, 14 and 15 together.

The foregoing methods completes doll ready to rip back and insert voice attachment and to paint face and hair.

With reference to Figure 15 the upper and lower parts 30^a and 30^b of the legs are con-

nected together by a suitable holdfast device 30c forwardly of the stitching 20a to make a stiff joint between the parts 30a and 30b, whereby a unique stepping motion can be had, when the doll is tilted forward keeping one foot on surface and the other free, provided upper and lower front of knee are pinned secured together so as to leave front of leg straight and rigid, and backward movement of the leg being checked by extension of buttocks below the line dividing trunk from legs.

The doll possesses a characteristic of either a firm rigid neck or a bobbing head with a limp neck, provision for holding articles in the hands, postures of not only sitting alone, but on knees or head with body erect, or on hands and knees as in a creeping position, with arms crossed at back of head, arms balanced on horizontal line with shoulders, as if expecting to be taken, and other postures. These postures are assured by adhering to the following scale of proportionate lengths for the members of the doll body. The distance from top of head to top of front neck is equal to two-thirds the length of the front body. The leg portions are as long as the trunk portion, extending beyond to the location in face where the mouth is supposed to be. The arms extend the full length of trunk and below the dividing line of trunk and legs at end of buttock. It will be understood that the widening of parts does not interfere with postures. The doll includes a trunk with natural rounded convex abdomen and with the sections for the front of the trunk reaching to the dividing line of trunk and legs or joints of doll and extends below, forming front leg with extensions on sides of back legs and heels. Which plan, together with the process of fastening top of leg to front of trunk and not allowing any weight of legs to be on back of trunk, enables the doll to sit alone and provides free movement of legs in stepping. The doll includes a head corresponding to human shape, rather that of the ball shape, of the use of two sections forming the head and braced with four seams. A nodding head is obtained by stuffing neck limply. The top of the head is slightly rounded, thus aiding the standing on head posture. The forehead is round and extends to place for hair to begin. The arms are in one straight piece with acute angle shaped darts taken about elbow location to bring arms in line with the front body and legs. The arms of the doll are stuffed to a point a substantial distance from the shoulder line, to a place where head part is fastened to trunk, equal to the diameter of the arm at the top, where arm, when stuffed, is stitched across, closing tightly the stuffing for the arm, and that portion above the stitching left limp, thereby enabling free movement of the arms and assisting in balancing posture. Both arms are made in one piece, the middle portion between the top of the two arms being limp and fastened across top of trunk. This method of fastening makes the attachment of arms secure. The stitching 20a provides the joints between the sections of the legs and the stitching 20b provides the joints between the legs and the trunks. The stitching 20b is arranged forwardly of the longitudinal median of each of the upper sections of the leg. See Figure 5. The stitching 20a is arranged rearwardly of the longitudinal median of the lower sections of the leg. See Figure 6. By this arrangement the joints between the sections of the legs are arranged rearwardly with respect to the joints between the upper sections of the legs and the lower end of the front of the trunk. The top of the legs, as well as the top of the lower leg sections are of convex curvature. The rounded rear bottom of the trunk corresponding to the rounded back portion of the top of each leg provides for a perfect sitting posture.

The principle of constructing a doll body can be applied to the construction of four footed animals as the size of the sections can be changed to provide for the purpose intended.

It is thought the many advantages of a doll, in accordance with this invention, can be readily understood, and although the preferred embodiment of the invention is as illustrated and described, yet it is to be understood that changes in the details of construction can be had which fall within the scope of the invention as claimed.

What I claim is:

1. In a doll of the soft stuffed type, a casing for the reception of a stuffing, said casing being formed from a series of connected sections to provide when stuffed the head, neck, trunk, legs and feet of the doll, a pair of corresponding, opposed, flexible sections of strip-like form secured together throughout at their edges, extending flatwise across the top of and secured to opposite sides of the top of the trunk, said members projecting outwardly from said sides, stitching spaced from and outwardly with respect to each of said sides disposed transversely of and coacting with said members at two spaced points to provide adjacent said sides a pair of opposed stuffing receiving casings forming the arms and hands of the doll, the portions of said members between said spaced stitching abutting throughout, and the portions of said members between said spaced stitching and the sides of the said trunk providing flexible couplings for said arms, said members outwardly with respect to said stitchings having aligning darts in their forward edges and with the darts closed to project the lower portions of the arms forwardly, and means for securing the hands in a doubled-up position to provide openings for receiving articles.

2. In a doll of the soft stuffed type, a pair of corresponding, superposed, combined arm and hand forming members of strip-like form, said members being flexible and secured together, each of said members having its forward edge provided with a transverse dart between its transverse center and each end thereof, the edges of said darts being secured together to project the end portions of the members forwardly, means adjacent to each side of the transverse centers of said members and spaced inwardly from said darts and coacting with said members to provide a pair of casings, a stuffing within and coacting with each of the casings to form the arms and hands of the doll, that part of said members between said means providing a flat, flexible coupling between said casings to maintain them in spaced relation, and said members having the ends thereof extended inwardly and anchored to provide openings for the reception of articles.

3. In a doll of the soft stuffed type, an open bottom casing adapted to receive a stuffing to form the head, neck and shoulders of the doll, said casing being formed of two sections connected together at the sides and tops thereof, each of said sections having the major portion of each side edge of convex contour and the remaining portion of ogee curvature directed outwardly, a dart at its top and a lengthwise extending cutout portion centrally of its bottom, the cutout portion of one section being of greater length than the other, the edges of the darts and cutout portions being secured together.

4. In a doll of the soft stuffed type, an open top and bottom casing adapted to receive a stuffing to form the trunk and legs of the doll, said casing being formed of a back section and a pair of corresponding, oppositely slitted front sections of less width and greater length than the back section, each of said front sections formed of an upper part having oppositely curved side edges and a tapered lower part of greater width than the upper part and provided with a pair of oppositely disposed, transversely extending cutaway portions, and said back section having oppositely disposed curved side edges, a lengthwise opening intermediate its ends having its edges connected together, a dart at its upper end having its edges connected together and a cutout portion at its bottom formed with convex edges connected together, the side edges of said back section being connected to the outer side edges of said upper parts, the inner side edges of said upper parts being connected together, and the side edges of each lower part being connected together.

In testimony whereof, I affix my signature hereto.

MINNIE M. IVEY.