May 20, 1958 J. WEIH 2,835,075

WALKING AND SITTING DOLL

Filed March 8, 1957

FIG. 1.

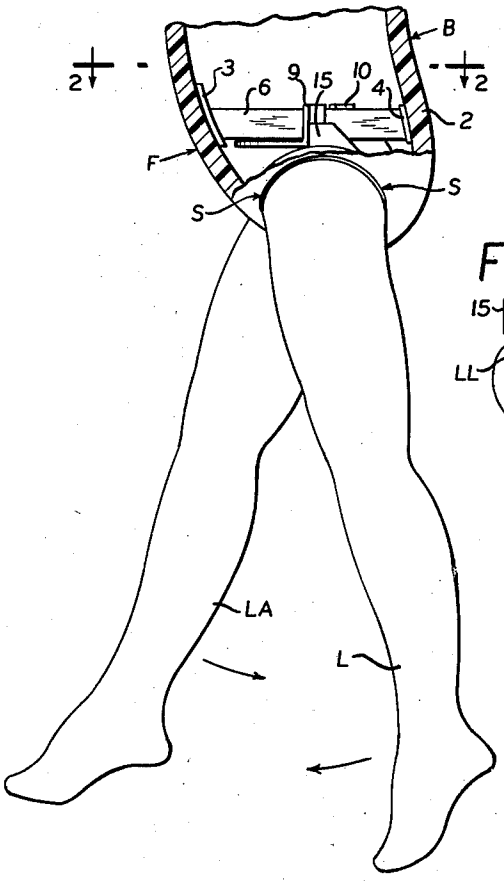


FIG. 3.

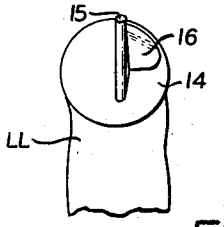


FIG. 4.

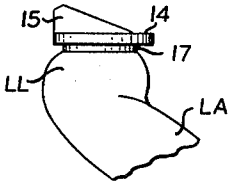


FIG. 5.

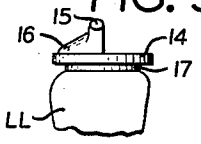


FIG. 6.

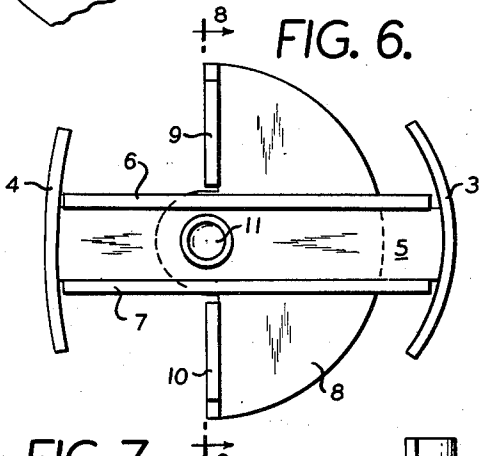


FIG. 7.

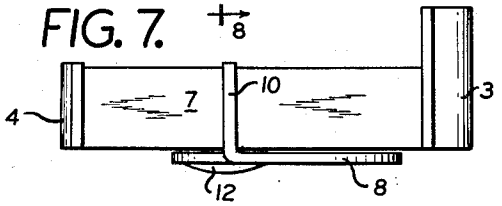


FIG. 2.

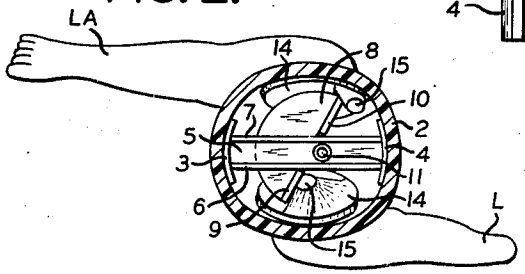
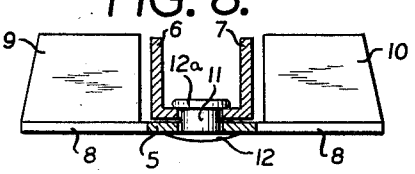


FIG. 8.



INVENTOR
JULIUS WEIH
BY Mock & Blum
ATTORNEYS.

United States Patent Office 2,835,075 Patented May 20, 1958

2,835,075

WALKING AND SITTING DOLL

Julius Weih, Ozone Park, N. Y., assignor to Ideal Toy Corporation, Hollis, N. Y., a corporation of New York

Application March 8, 1957, Serial No. 644,813

1 Claim. (Cl. 46—149)

This invention relates to a new and improved walking and sitting doll, which is made of simple and sturdy parts, which can be easily manufactured and assembled, with a minimum number of parts.

The invention is explained below.

Fig. 1 is a side elevation of the improved doll, partially in vertical transverse section, showing one leg in its forward walking position, and showing the other leg in its rear walking position.

Fig. 2 is a section on the line 2—2 of Fig. 1.

Fig. 3 is a detail side elevation of the top of a leg, with the top collar shown in a vertical position.

Fig. 4 is a detail elevation of the top of the leg, in which said collar is in a horizontal position.

Fig. 5 is similar to Fig. 4, in which said collar is turned 90° from its position of Fig. 4.

Fig. 6 is a top plan view of the walking device.

Fig. 7 is a side elevation of the walking mechanism.

Fig. 8 is a section on the line 8—8 of Fig. 6.

The doll has a torso 2, which has a front wall F and a rear wall B. The torso 2 is flexible and resilient.

The oscillating walking device comprises a rigid, transverse channel-shaped metal web 5, which has vertical and parallel transverse flanges 6 and 7, a front vertical flange 3 and a rear vertical flange 4. These front and rear vertical flanges 3 and 4 are fixed to the walls F and B in any manner, as by screws or rivets. A metal plate 8, of semi-circular shape, is pivoted by a pivot 11 to web 5. Said pivot 11 has the usual enlarged heads 12*a* and 12.

Said plate 8 has integral planar vertical flanges 9 and 10 at the straight edge of said plate 8. This oscillating plate 8 may be connected in any manner to the torso. Thus, the plate 8 may be pivotally connected to the horizontal leg of an angular bar, the vertical leg of said angular bar being connected to a disc which has a depending flange which is fixed to the torso, said disc being insertible through the opening of a hip socket.

The legs LA and L are identical in structure, save that one is a right leg and the other is a left leg. They are resilient and flexible and of molded one-piece construction, or they may be made of joined sections.

Each said leg has, at its upper end, a portion LL which is inclined to the axis of the body of the respective leg as by an angle of approximately 45°.

If the two legs L and LA are placed horizontally, with their feet pointing forwardly in the same direction, one part LL of one leg is inclined upwards relative to the horizontal plane and the axis of the respective leg, and the other part LL of the other leg is inclined downwardly relative to the horizontal plane and the axis of the respective leg.

Each inclined part LL has a planar collar 14, and a circumferential groove 17 at the lower face of said collar 14. The plane of each collar 14 is perpendicular to the axis of the respective top part LL. Each circumferential groove 17 is also perpendicular to the axis of the respective top part LL.

For convenience of explanation, Fig. 3 shows the

collar 14 of the front leg LA in the vertical plane. In this position, the foot of the leg LA is pointed forwardly.

The top face of collar 14, as represented in Fig. 3, has a top, integral, projection 15 of general triangular shape, which has an integral reinforcement 16 which is directed towards the rear of the leg. As above noted, each entire leg is of one-piece molded construction.

For convenience of illustration, the collar 14 and groove 17 of said front leg LA are shown in horizontal position in Fig. 4, in which the leg LA is inclined rearwardly relative to its respective top part LL, and the foot of said leg LA is inclined upwardly relative to the horizontal plane of Fig. 4, with the toe of said foot above its heel. In this view, the reinforcement 16 is behind the planar projection 15.

In Fig. 5, the leg LA is in a position turned ninety degrees around a vertical axis from its position of Fig. 4, with the leg LA inclined towards the left of its top part LL, said top part LL being shown in the vertical position as in Fig. 4. In Fig. 5, the foot of the leg LA is inclined downwardly relative to the horizontal plane of Fig. 5 with the toe of said foot below its heel.

The torso 2 is provided with hip-sockets S. In order to assemble the legs L and LA with the flexible torso 2, said flexible collars 14 are forced through the openings of sockets S, to locate said collars 14 within the torso 2. The edge walls of said sockets S then fit in the respective grooves 17 and lightly grip said grooves yieldingly, in order to permit the easy walking movement and the sitting movement.

When both legs are vertical, their top parts LL are inclined oppositely relative to the vertical axis of torso 2. When both legs are in said vertical positions, the respective collars 14 are inclined upwardly and they make opposed angles of about 45° with the vertical axis of the torso 2. When the legs L and LA are thus vertical, the projections 15 abut the flanges 9 and 10 of the pivoted plate 8. Said flanges 9 and 10 are in the same plane. When both legs are vertical, said flanges 9 and 10 are in a lateral plane, as shown in Fig. 6.

During the walking movement, these projections 15 always abut the flanges 9 and 10, so that the legs are simultaneously turned in opposite directions relative to the torso. The legs L and LA turn very easily relative to the torso, with minimum friction in sockets S.

Both legs can be turned to a sitting position. Due to the angular and opposed position of collars 14 of the respective legs LA and L relative to the vertical axis of the torso, the legs are automatically spread apart in said sitting position. However, said legs are parallel to the axis of the torso during the walking movement.

In the sitting position, the projections 15 are spaced rearwardly from the flanges 9 and 10 and the plate 8, which may be at that time in a common lateral plane. However, when the legs are in a sitting position, their projections 15 are not moved below said flanges 9 and 10. Hence when the legs are restored to the vertical position, their projections 15 again abut the flanges 9 and 10 of plate 8.

Due to the angular shapes of projections 15, they abut the outer ends of flanges 9 and 10 of plate 8 during the walking movement, thus providing good turning leverage upon the pivoted plate 8. This is an important feature.

When both legs are in vertical position relative to the torso, the proximate edges of the projections 15 diverge upwardly relative to the vertical axis of the torso.

The pivoted or oscillating plate 8 may be replaced by any suitable device for causing the legs to turn simultaneously in opposed directions relative to the torso. Many such reciprocating devices are well-known.

In the assembly, each collar 14 turnably abuts the inner wall of torso 2.

The invention thus provides a combination walking and sitting doll with a minimum number of parts, because each leg is of a molded, one-piece construction.

What is claimed is:

A combination walking and sitting doll comprising a resilient and flexible hollow torso having a vertical axis, leg receiving sockets in said body including openings defined in the leg portion of said torso, said openings being inclined at an angle directed upward relative to said vertical axis, a resilient leg for reception in each of said socket openings, each leg having a body and a top inclined relative to its respective body and to said vertical axis, said top part of each leg including a collar insertable through said socket openings and turnably abutting the inner wall of said torso to prevent the removal of said leg therefrom; an oscillating walking device in said torso comprising a channel-shaped web having front and rear flanges, said front and rear flanges each being fixed to the respective front and rear walls of said hollow torso, a plate pivoted to said web intermediate the channel legs thereof and having diametrically disposed upstanding flanges one on each side of said channel legs, said collars on each of said legs having an upwardly extending projection disposed at an angle relative to said collar, the proximate edges of said angular projections being upwardly divergent relative to each other when said legs are in a vertical position relative to the torso, said projections abutting a respective one of said flanges of said pivoted plate when said legs are in walking position, said legs being turnable in said sockets to a sitting position in which said projections are spaced from said flanges.

References Cited in the file of this patent

UNITED STATES PATENTS

1,897,914 Schaeffer ---------- Feb. 14, 1933

FOREIGN PATENTS

518,037 Belgium ---------- Mar. 14, 1953