

SPECIFICATION

Toy figure

- 5 This invention generally relates to toy figures and, more particularly, to a toy figure for use as a component in a toy building set composed of building blocks and other elements provided with coupling means for detachably inter-connecting adjacent blocks or other components. Such toy building sets are well-known and a typical example is described in British patent no: 866,557. A characteristic of such building sets is that base plates forming part of such sets have a series of coupling studs uniformly spaced apart in both longitudinal and transverse directions, so that two pairs of adjacent studs define a square in which the distance between the axes of adjacent studs is equal to the module *m* of the building set.

- More recently, it has been suggested to supplement the known building sets with dolls and similar toy figures provided with movable limbs and coupling means for detachably connecting them to other components of the building set.

- According to the invention, a toy figure for this purpose comprises a body having a head, a pair of arms, and a leg assembly comprising a connecting piece removably mounted on the body and including a pair of sidewardly extending pivots, carrying a pair of identical, removable leg members, the leg members having substantially flat rear faces (calves) formed with respective recesses and foot parts having plane bottom faces (soles) also formed with respective recesses, each of the recesses having a width substantially equal to the width of the coupling studs of the base plate and being disposed symmetrically with respect to an axis extending in the lengthwise direction of the leg member and foot part respectively, the distance between the said axes of symmetry, in the position of the leg members wherein the planes of their flat rear faces (calves) coincide, being equal to the module *m* of the building set. This improvement enables the figure to be mounted in many different positions relatively to the base plate and, in particular, in both upright and seated positions.

- Two examples of toy figure in accordance with the invention will now be described with reference to the accompanying drawings, in which:-

- Figure 1 is a rear elevation of one form of figure showing the back and the rear face of the leg members in an upright position;

- Figure 2 is a side view showing the same figure in a seated position;

- Figure 3 is a perspective view of a connecting plate for detachably mounting the leg members in the body member of the figure;

- Figure 4 is a similar perspective view show-

ing the lower face of the connecting plate;

Figure 5 is a perspective view of a leg member showing the rear face and one side face thereof;

- Figure 6 is a similar perspective view showing the front face and the other side face of the leg member;

- Figure 7 is a perspective view showing the leg assembly comprising a pair of identical leg members mounted on the connecting plate of Figs. 3 and 4;

- Figure 8 is a rear elevation similar to Fig. 1 showing a second form of figure with a modified form of the rear face of the leg members;

Figure 9 is a side elevation of the same figure, partly in vertical section;

Figure 10 is a sectional view taken on the line X-X of Fig. 8;

- Figure 11 is a sectional view taken on the line XI-XI of Fig. 9;

- Figure 12 is a side elevation, partly in vertical section, showing the figure of Figs. 8 and 9 in a seated position on a base plate;

Figure 13 is a rear elevation of the figure shown in Fig. 12.

- The toy figure illustrated in Figs. 1 to 7 comprises a body member 10 having a pair of arms 11 pivotally mounted on the body member around a horizontal axis *b-b*. The upper portion of the body member 10 is provided with a neck portion 13 and a head 12 mounted thereon and comprising a coupling stud 14 for detachable inter-connection with elements pertaining to a toy building set.

- The body member 10 comprises a cavity receiving a pair of coupling studs 23 on the top face of a connecting plate 21, the bottom face of which is formed with a cylindrical cavity 22 providing a concave bearing face for a corresponding convex upper face 20d of a pair of identical leg members 20 each having side faces 20a and 20b and a substantially flat rear face (calf) 20c. In the middle of the bottom face 22 of the connecting plate 21 there is provided a substantially disc-shaped holder 24 having a pair of laterally extending pivots 25 for pivotally mounting the leg members 20 on the connecting plate 21. A bore 28 is provided in one side face 28a of the upper cylindrical portion of each leg member co-axially with the cylindrical face 20d and 22 for pivotally mounting the leg member 20 on the pivot 25. Projections 26 adjacent the ends of the pivots 25 provide for a snap locking effect when mounting the leg members on the pivots.

- In this construction, recesses in the flat rear face (calf) of the leg members comprise two identical circular bores 27 in each leg member, and the distance between the centres of these bores is equal to the module *m* of the building set, i.e. to the distance between the axes of a pair of adjacent coupling studs 30

on a base plate 31 pertaining to the building set. Moreover, the width of the disc 24 between the leg members 20 is such that, in the position shown in Fig. 1 where the planes of the rear faces 20c coincide, the lateral distance between the centres of the bores 27 is also equal to the module m of the building set. In this position, therefore, the four bores 27 define a square, the side of which is equal to the module m , which enables the figure to be mounted in a seated position on two adjacent pairs of the studs 30 of the base plate 31, as shown in Fig. 2.

In order that this figure may also be mounted in an upright position on the base plate 31, the leg members comprise foot parts 29, the bottom face (sole) of each of which is provided with a recess 32 for detachably connecting to the studs 30 of the base plate 31.

Referring next to Figs. 8 to 13, the illustrated construction will generally be preferred because it enables the toy figure to be moved relatively to the base plate instead of being locked to the studs, as explained with reference to the figure illustrated in Figs. 1 to 7. Whether or not it is of particular importance to provide for a slideable or rocking inter-connection between a toy figure and its base plate is chiefly a matter of choice, but it is generally considered that most children will prefer the toy figure to be movable relatively to the base plate and, therefore, the figure shown in Figs. 8 and 13 will be referred to as the preferred form.

In this construction the reference numbers correspond to those of Figs. 1 to 7, but are preceded by the digit "1". Thus, the body 10 to Figs. 1 and 2 is designated at 110 in Figs. 8, 9, 12 and 13, the leg members 20 of Figs. 1 to 7 are designated as 120 in Figs. 8 to 13, and so on.

The characteristic feature of the preferred form of construction shown in Figs. 8 to 13, is that the recesses in the calves of the leg members 120 and in the sole of the foot parts 129 are channels or grooves 127 and 132 respectively. As shown in Fig. 10, the channels 127 are symmetrical with respect to lengthwise extending median planes X-X which are inter-spaced at a distance which is equal to the module m of the building set, and the width of these channels is substantially equal to the width of the coupling studs 130 of the base plate 131, shown in Figs. 12 and 13. Likewise, the recesses in the foot parts 129 are formed as channels 132 which extend in the lengthwise direction of the foot parts and hence at right angles to the recesses 127 of the leg members 120, the width of the channels 132 being also equal to the width of the studs 130.

As shown in Fig. 9, the channels 132 in the foot parts 129 may be open at the front end 132a, so as to enable the figure in the

upright position to slide along two rows of studs 130 of the base plate. In the seated position of Figs. 12 and 13, the figure is slideably mounted on the base plate along an adjacent pair of rows of studs 130 which engage the channels 127.

As shown in Figs. 10 and 11, the leg members 120 comprise a front face 120a and two side faces 120b, and the foot members 129 comprise a top face 129a and two side faces 129b.

CLAIMS

1. A toy figure for detachably mounting on a base plate pertaining to a building set and having a series of coupling studs uniformly spaced apart in both longitudinal and transverse directions, so that two pairs of adjacent studs define a square in which the distance between the axes of adjacent studs is equal to the module m of the building set, the toy figure comprising a body having a head, a pair of arms, and a leg assembly comprising a connecting piece removably mounted on the body and including a pair of sidewardly extending pivots, carrying a pair of identical, removable leg members, the leg members having substantially flat rear faces (calves) formed with respective recesses and foot parts having plane bottom faces (soles) also formed with respective recesses, each of the recesses having a width substantially equal to the width of the coupling studs of the base plate and being disposed symmetrically with respect to an axis extending in the lengthwise direction of the leg member and foot part respectively, the distance between the said axes of symmetry, in the position of the leg members wherein the planes of their flat rear faces (calves) coincide, being equal to the module m of the building set.

2. A toy figure according to claim 1, wherein the recesses in the flat rear faces (calves) of the leg members are channels extending in the lengthwise direction of the leg members.

3. A toy figure according to claim 2, wherein the recesses in the bottom face (sole) of the foot parts are channels debouching into the channels in the flat rear faces (calves) of the leg members.

4. A toy figure according to claim 1, wherein the recesses in the flat rear faces (calves) of the leg members comprise a pair of cylindrical bores, the distance between the axes of which is equal to the module m of the building set.

5. A toy figure according to claim 4, in which the recess in the bottom face (sole) of each foot part is a cylindrical bore having substantially the same diameter as that of the coupling studs of the base plate.

6. A toy figure according to any one of the preceding claims, in which the body is formed with a cavity receiving a pair of con-



on a base plate 31 pertaining to the building set. Moreover, the width of the disc 24 between the leg members 20 is such that, in the position shown in Fig. 1 where the planes of the rear faces 20c coincide, the lateral distance between the centres of the bores 27 is also equal to the module m of the building set. In this position, therefore, the four bores 27 define a square, the side of which is equal to the module m , which enables the figure to be mounted in a seated position on two adjacent pairs of the studs 30 of the base plate 31, as shown in Fig 2.

In order that this figure may also be mounted in an upright position on the base plate 31, the leg members comprise foot parts 29, the bottom face (sole) of each of which is provided with a recess 32 for detachably connecting to the studs 30 of the base plate 31.

Referring next to Figs. 8 to 13, the illustrated construction will generally be preferred because it enables the toy figure to be moved relatively to the base plate instead of being locked to the studs, as explained with reference to the figure illustrated in Figs. 1 to 7. Whether or not it is of particular importance to provide for a slideable or rocking inter-connection between a toy figure and its base plate is chiefly a matter of choice, but it is generally considered that most children will prefer the toy figure to be movable relatively to the base plate and, therefore, the figure shown in Figs. 8 and 13 will be referred to as the preferred form.

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As shown in Fig. 9, the channels 132 in the foot parts 129 may be open at the front end 132a, so as to enable the figure in the

upright position to slide along two rows of studs 130 of the base plate. In the seated position of Figs. 12 and 13, the figure is slideably mounted on the base plate along an adjacent pair of rows of studs 130 which engage the channels 127.

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5. A toy figure according to claim 4, in which the recess in the bottom face (sole) of each foot part is a cylindrical bore having substantially the same diameter as that of the coupling studs of the base plate.

6. A toy figure according to any one of the preceding claims, in which the body is formed with a cavity receiving a pair of con-



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- necting studs extending upwardly from the top face of a connecting plate forming part of the leg assembly which also includes a substantially disc-shaped pivot holder extending
- 5 downwardly from the middle of the bottom face of the connecting plate and on which the transversely extending pivots are provided at either side, the width of the pivot holder being such that the leg members mounted
- 10 thereon are inter-spaced, so as to provide for a distance between the axes of symmetry of the recesses in the leg members equal to the module m of the building set.
7. A toy figure substantially as described
- 15 and as illustrated with reference to Figs. 1 to 7 or 8 to 13 of the accompanying drawings.

Printed for Her Majesty's Stationery Office
by Burgess & Son (Abingdon) Ltd.—1982.
Published at The Patent Office, 25 Southampton Buildings,
London, WC2A 1AY, from which copies may be obtained.