

Feb. 12, 1952

K. W. JOHNSON

2,585,781

CONSTRUCTION TOY

Filed May 1, 1947

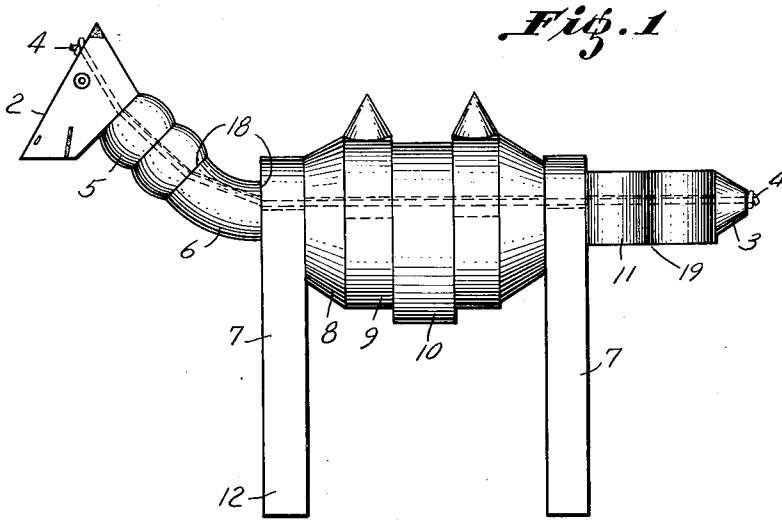


Fig. 3

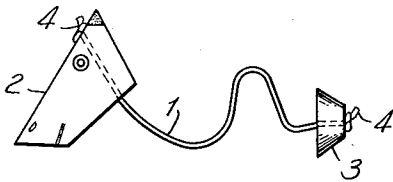


Fig. 2

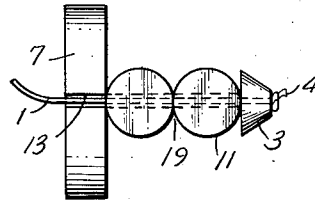


Fig. 4

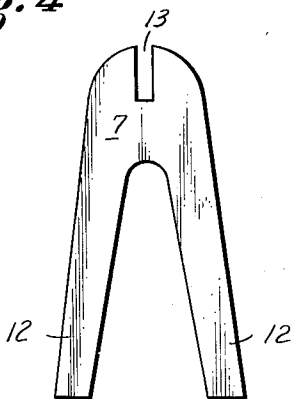
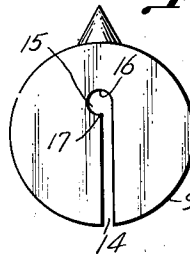


Fig. 5



Inventor:
K. W. Johnson

UNITED STATES PATENT OFFICE

2,585,781

CONSTRUCTION TOY

Keith Whitaker Johnson, Arlington County, Va.

Application May 1, 1947, Serial No. 745,258

1 Claim. (Cl. 46-22)

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This invention relates to a construction toy, more particularly, a construction toy adapted for the construction of simulations of figures or the like, such as camels, giraffes, horses, alligators, snakes, trains, or other animate or inanimate objects.

One object of this invention is to provide a construction toy, or take-apart toy, having an elastic connector adapted to hold together with suitable security a variable number of construction elements of various shapes and sizes, with the construction elements being readily connected to and removed from the connector.

Another object of this invention is to provide a construction toy with which may be constructed simulations adapted to be caused to move or bend in a realistic manner.

Another object of this invention is to provide a construction toy adapted to create a percussive sound when its parts are pulled apart and then released so as to snap together.

Another object of this invention is to provide a construction toy with which may be constructed figures having some parts in contact with and other parts elevated above a supporting surface.

Another object of this invention is to provide a construction toy with which may be constructed figures having parts aligned at an angle with other parts.

Another object of this invention is to provide a construction toy which is simple and economical to manufacture.

These and other objects of this invention are accomplished by means hereinafter set forth, particularly in the appended claim, and illustratively exemplified in the accompanying drawing, in which:

Figure 1 is a side view of an embodiment of the invention;

Figure 2 is a top view of the tailward portion of the same;

Figure 3 is a side view of the connector;

Figure 4 is a plan view of one of the construction elements; and

Figure 5 is a plan view of another of the construction elements.

Referring to the figures, the connector shown separately in Figure 3 consists of an elastic cord 1, to one end of which is attached a bead 2 simulating a head of an animal, and to the other end of the cord a bead 3 simulating the end of a tail of an animal. The knots 4 in the ends of the cord 1 prevent the beads 2 and 3 from coming off of the cord. In Figure 1 the connector is connecting various construction elements 5, 6,

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7, 8, 9, 10, and 11. The cord 1 lies within grooves in the construction elements, for example the grooves 13 and 14 shown in Figures 2, 4, and 5.

The construction element 7, shown separately in Figure 4, is employed with the bifurcated leg portions 12 extending downward to support the toy, as in Figure 1. This element 7 has a groove 13 opening upward and adapted to receive the cord 1, with the cord tending to settle to the bottom of the groove when the parts are assembled as shown in Figure 1. In Figure 1, the two elements 7 support the figure above any level supporting surface upon which the leg portions 12 of the elements 7 may be placed.

The construction element 9, shown separately in Figure 5, has a groove 14 opening downward and extending upward to above the center of mass of the element. Hence, when the cord 1 is within the groove 14, the element straddles the cord 1 and tends to settle downward until the cord reaches the upper end of the groove and passes tangentially into the aperture 15 so that the upper surface 16 of the aperture rests upon the cord 1. Since the aperture is above the center of mass of the element 9, the element tends to remain upright upon the cord and not fall off. The shoulder 17 at the lower portion of the aperture 15 and adjacent the upper end of the groove 14 also aids in hindering the too ready dislodgment of the element 9 from the cord.

The construction elements 5, 6, 8, 10, and 11 have grooves opening downward, the groove being either like groove 13 or groove 14, that is, without or with inward termination tangentially into an aperture having a shoulder adjacent said inward termination.

Construction element 6 is adapted to permit the construction of bends in toy figures. The two opposite end surfaces 18 of the element are in upwardly approaching or converging planes, with the result that the tension in the cord tends to draw the cord toward the upper part of the groove in the element, thereby increasing the security with which the element is held in place. Removal of element 6 from the cord would involve stretching the cord and increasing the tension therein as the wedge-shaped element is moved so as to bring the cord toward the outward portion of the groove. The pressure of adjacent elements or beads tends to wedge the element 6 into a secure position upon the cord, permitting readier use of this element in positions in which the groove opens upward, thereby facilitating construction of downward bends in the necks, tails, or other parts of toy figures.

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In Figure 1, all of the separate construction elements are in an end to end abutting relationship and held in such relationship by the pressure of the beads 2 and 3 of the connector upon the elements adjacent the beads and by the pressure of the elements upon each other as the result of the tension in the cord 1. The beads 2 and 3 of the connector prevent the cord 1 from pulling longitudinally through the grooves in the elements. Each of numerous and varied elements may be placed in various positions upon the connector, with the cord within the groove of the element, and each of the elements may also be separated from the connector, thereby permitting the construction, alteration, and disassembly of numerous and varied figures. Due to the tension in the cord when a sufficient number of elements are connected to form a figure, such figure may be lifted by one or more of its parts without the figure falling apart.

The construction elements 11 shown in Figures 1 and 2 have ends 19 convex as seen from above, thereby permitting the tail or other portion of a figure constructed of such elements to be bent or wiggled from side to side, or bent and then released to spring back into straightward position under the influence of the tension in the cord.

When a toy figure has been constructed, either of the beads 2 and 3, or a bead and adjacent element or elements, may be pulled out longitudinally of the cord and outwardly from the remaining elements. When released from this position, the tension in the cord will snap the parts together with a percussive sound, amusing to a child.

The elements and beads may be made of wood, plastic, or other suitable material. The dimensions, shapes, and designs of the parts of this toy may be varied considerably, thus increasing the variety of figures which may be constructed.

Within the scope of the appended claim, one skilled in the art may make considerable changes and modifications without departing from the spirit of the invention.

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I claim:

A construction toy comprising an elongated elastic connector and separate construction elements adapted to be placed in end to end abutting relationship; each of said construction elements having a groove in its longitudinal edge for receiving the connector, and means at each end of said connector to prevent the ends of said connector from pulling longitudinally through the groove in the construction element when the connector is within the groove of such construction element; the groove in at least one of said construction elements having an unenlarged portion and having an enlarged terminal portion centrally of the element, the unenlarged portion of said groove meeting the enlarged portion in tangential relation thereto, and forming at the juncture with the enlarged portion a shoulder adapted to hinder but not prevent removal of the connector from said enlarged portion, so that the connector may be more securely retained within the enlarged portion of the groove.

KEITH WHITAKER JOHNSON.

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