

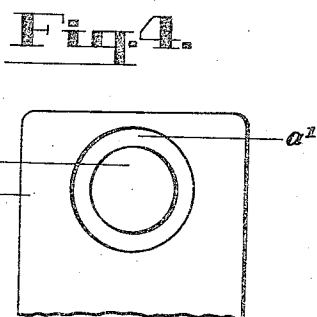
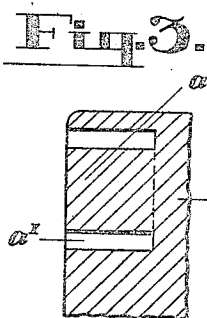
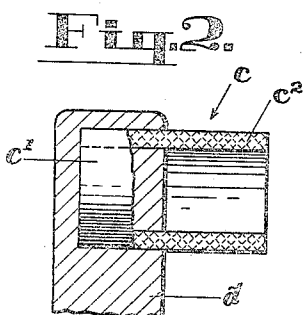
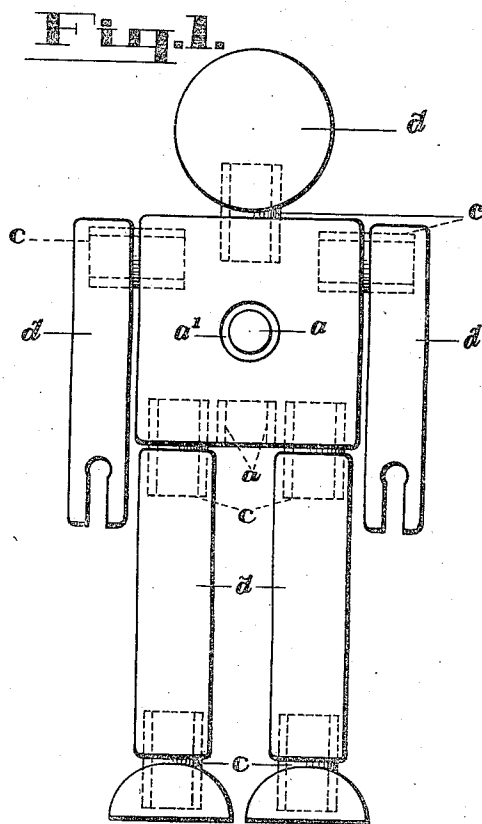
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CONSTRUCTIONAL TOY

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## UNITED STATES PATENT OFFICE

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## CONSTRUCTIONAL TOY

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## 3 Claims. (Cl. 46—173)

This invention has reference to constructional toys that enable models, figures and the like to be made up or constructed by the assembly of differently-shaped blocks or other units, the assembly being effected by fastening expedients which are formed or embodied in the said units.

According to the said invention, the assembly of the shaped units is provided by connections comprising a peg or pivot-like member which is formed integral with the one unit and preferably does not project beyond the surface thereof and a rubber sleeve-like member which is embodied in the other unit and which is elastic in the longitudinal as well as in the radial direction and is adapted, on being forced or pressed over its complementary peg-member, to frictionally engage or grip the said peg and thus make an effective elastic connection between the units, which connection nevertheless admits of angular movement between the connected units and of separation of the said units as and when required.

The peg member is of circular section and is surrounded by an annular groove in which the elastic sleeve member is contained when connection between two units has been made. These connecting means enable flat-sided block-units to be joined with their plane surfaces close together or they may be spaced apart within certain limits. The connections also enable block-units to be elastically assembled at any relative angle in parallel planes since the elastic sleeve member frictionally grips the peg-member when the connection is made.

Although the connections enable units to be easily assembled, disconnection is more difficult since when the sleeve member is pressed onto the peg, the said sleeve stretches radially so that only a light push is necessary to make the connection. If, however, an attempt is made to separate the connected units, the pull tends to contract the sleeve and bind it to the peg.

The accompanying drawing shows, in Figure 1, a figure made up by the assembly of a number of differently-shaped blocks or units by means of connections according to the present invention.

Figure 2 shows, on an enlarged scale, a sectional elevation of the elastic sleeve member of the connection, and

Figures 3 and 4 shows a section and elevation of the peg member.

In this example, the peg member *a*, which is of circular section, is integral with, and flush with the face of, the unit embodying the same, and is formed by cutting or forming an annular groove *a*<sup>1</sup> in the material of the unit *b*. This groove accommodates the elastic sleeve *c* after the latter has been pressed over the peg *a*.

The sleeve *c* which is made of rubber or other

radially and longitudinally elastic material, is secured at one end *c*<sup>1</sup> in the unit *d* (see Figure 2) and projects beyond the face of the said unit for a sufficient distance to enable the free elastic part *c*<sup>2</sup> to be engaged over the peg.

When blocks or other units are assembled into toys, figures, or models by means of connections according to the present invention, the sleeve-carrying units can readily be adjusted angularly with respect to the peg-carrying unit by turning the sleeves axially about the pegs, and when so adjusted, the units will be elastically retained in their adjusted positions by the grip of the elastic sleeves on the pegs.

Having described my invention what I claim and desire to secure by Letters Patent is:—

1. A constructional toy in which the assembly of shaped blocks or units into figures, models, and the like is provided for by connections comprising a peg or pivot-like member which is formed integral with the one unit, and preferably does not project beyond the surface thereof, and a rubber sleeve-like member which is carried by in the other unit and is elastic in the longitudinal as well as in the radial direction; the said sleeve being adapted, on being pressed over its complementary peg member, to frictionally engage or grip the said peg.

2. A constructional toy in which the assembly of shaped blocks or units into figures, models, and the like is provided for by connections comprising a peg member of substantially circular cross-section formed in the material of one unit by forming an annular groove in the material of the said unit, and a rubber sleeve-like member of substantially annular cross-section which is carried by the other unit and is elastic in the longitudinal as well as in the radial direction, the said sleeve being adapted to enter the groove in the first unit and, on being pressed over the peg member defined by said groove, to frictionally engage or grip the said peg member.

3. A constructional toy in which the assembly of shaped blocks or units into figures, models and the like is provided for by connections comprising a peg member formed in the material of one unit by forming an annular groove in the material of said unit, a peg member formed in the material of a second unit by forming an annular groove in the material of said second unit, the groove and peg member of each unit corresponding substantially in shape and size, and a rubber sleeve-member which is elastic in the longitudinal as well as in the radial direction and is adapted, on being pressed into the grooves and over the peg members in the two units, to frictionally engage or grip the said peg members.

GEORG KELLNER.