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CHANGEABLE ASSEMBLY SET FOR AMUSEMENT AND EDUCATIONAL PURPOSES

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Fig. 1.



Fig. 2.

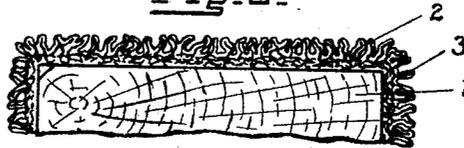
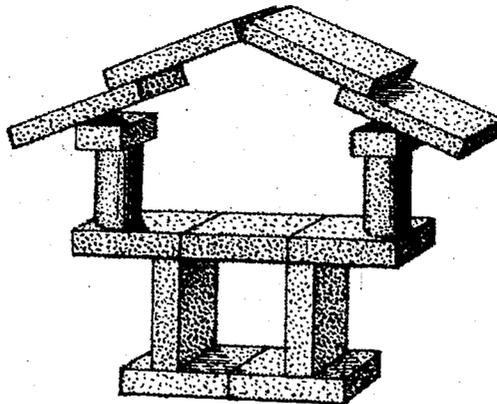


Fig. 3.



Fig. 4.



WITNESSES:

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CHANGEABLE ASSEMBLY SET FOR AMUSEMENT AND EDUCATIONAL PURPOSES.

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My invention relates to that class of merchandise which is usually sold in sets of disassembled parts designed to be repeatedly used in the construction of various objects, structures and designs. It is particularly applicable to toy assembly sets commonly known as building blocks or construction toys.

One object of the invention is to provide assembly sets the parts of which can be easily and quickly assembled in any desired relationship and will retain their positions without the use of fastening devices.

Another object of the invention is to provide assembly parts having surfaces which will adhere to each other when placed in contact but will permit of being pulled apart without great effort.

A further object is to provide assembly parts which will adhere to each other but will not adhere to a person's hands or to other ordinary surfaces such as cloth or wood.

Still further objects are to provide assembly sets inexpensive in construction and attractive in appearance which can be manufactured in a great variety of shapes and with which structures may be built of interesting and unusual design, with overhanging parts, the completed structures having such rigidity that they may be lifted and moved about without falling apart.

With the foregoing and other objects in view the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed.

In the accompanying drawings Figures 1, 2 and 3 are sections of individual parts, each representing a different embodiment of my invention. Figure 4 shows a structure built with one of these assembly sets the parts of which are in the form of building blocks.

Figure 1 is a section of a piece of fibrous material such as felt, the outer fibers of which are coated with an adhesive material such as unvulcanized rubber. I prefer to apply the adhesive, not as a mass covering the fibers and closing the space between them, but as a coating for the individual fibers leaving some open spaces between them. This is accomplished by dipping the felt piece in a solution of rubber and allowing it to dry.

Figure 2 is a section of a part, the body 1 of which is preferably made of some rigid material such as wood and the surfaces of which are covered with a fibrous material 2 such as cloth or felt permanently glued to the surface. The outer surfaces of the cloth are coated with some adhesive 3 as described in connection with Figure 1. This construction has the advantage of producing a resilient surface similar to that of solid felt and also the advantage of being more rigid.

In Figure 3 is shown a section of a part, the body 1 of which is made of some rigid material such as wood and is surfaced with an unwoven fibrous material 2 known as flock which is held in place by a binder 4, preferably a hard varnish or glue. The flock fibers are coated with an adhesive 3 such as unvulcanized rubber applied as previously described.

When two surfaces prepared as herein described are pressed together the projecting adhesive coated fibers which are presented to each other tend to overlap and interlock, thus the area of adhesive surface making contact is much greater than it would be with nonfibrous surfaces. The fibrous surface also furnishes increased gripping area for the adhesive so that the adhesive will not be pulled away when two assembly parts are separated after being pressed together. The fibrous surface also provides a certain amount of resiliency which permits each surface to adapt itself to inequalities of the other.

I prefer to use unvulcanized rubber as the adhesive because of its cohesive quality and because it has very little affinity for other materials, and objects coated with it do not tend to adhere to other surfaces not so coated. It also has the desirable quality of retaining its cohesiveness for a long time.

Figure 4 represents a structure built with a set of building blocks embodying my invention and illustrates the unique adaptability of this invention for making comparatively rigid structures, with overhanging portions, without the use of special fastening devices, a feature which adds greatly to the pleasure and interest of those using an assembly set of this kind.

My invention is not limited to the embodiment thereof hereinbefore described and illustrated in the accompanying drawings,

but may be embodied in various other forms within the nature of the invention as it is defined in the following claims.

I claim as my invention:

5 1. A changeable assembly set for amusement and educational purposes formed of a plurality of different elements shaped to be combined to provide a variety of structures and each having a yielding roughened surface coated with an adhesive material which will cause the elements to adhere to each other when placed in contact and which will maintain its adhesive property, at the same time permitting the ready separation of the elements for reassembling to produce other figures.

20 2. A changeable assembly set for amusement and educational purposes formed of a plurality of different elements shaped to be combined to provide a variety of structures and each having a rigid body portion, a yielding roughened surface applied to such body portion and an adhesive coating applied to said yielding roughened surface which will cause the elements to adhere to each other when placed in contact and which will maintain its adhesive property, at the same time permitting the ready separation of the elements for reassembling to produce other figures.

30 3. A changeable assembly set for amusement and educational purposes formed of a plurality of different elements shaped to be combined to provide a variety of structures and each having a rigid body, a surface of fibrous material on the body and an adhesive coating covering the individual strand but not entirely filling the spaces between the strands, which will cause the elements to adhere to each other when placed in contact and which will maintain its adhesive property, at the same time permitting the ready separation of the elements for reassembling to produce other figures.

45 4. A changeable assembly set for amusement and educational purposes formed of a

plurality of different elements shaped to be combined to provide a variety of structures and each having a fibrous surface and an unvulcanized rubber coating for said surface which will cause the elements to adhere to each other when placed in contact and which will maintain its adhesive property, at the same time permitting the ready separation of the elements for reassembling to produce other figures.

50 5. A changeable assembly set for amusement and educational purposes formed of a plurality of different elements shaped to be combined to provide a variety of structures and each having a surface coated with unvulcanized rubber which will cause the elements to adhere to each other when placed in contact and which will maintain its adhesive property, at the same time permitting the ready separation of the elements for reassembling to produce other figures.

60 6. A changeable assembly set for amusement and educational purposes formed of a plurality of different elements shaped to be combined to provide a variety of structures and each having a surface of unwoven fibrous material and an adhesive coating said material which will cause the elements to adhere to each other when placed in contact and which will maintain its adhesive property, at the same time permitting the ready separation of the elements for reassembling to produce other figures.

70 7. A changeable assembly set for amusement and educational purposes, the parts thereof composed of a rigid material, and surfaced with a fibrous material, the outer fibers of the fibrous material being coated with unvulcanized rubber.

80 8. A changeable assembly set for amusement and educational purposes, the parts thereof composed of a rigid material, and surfaced with an unwoven fibrous material, said fibrous material being coated with unvulcanized rubber.

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