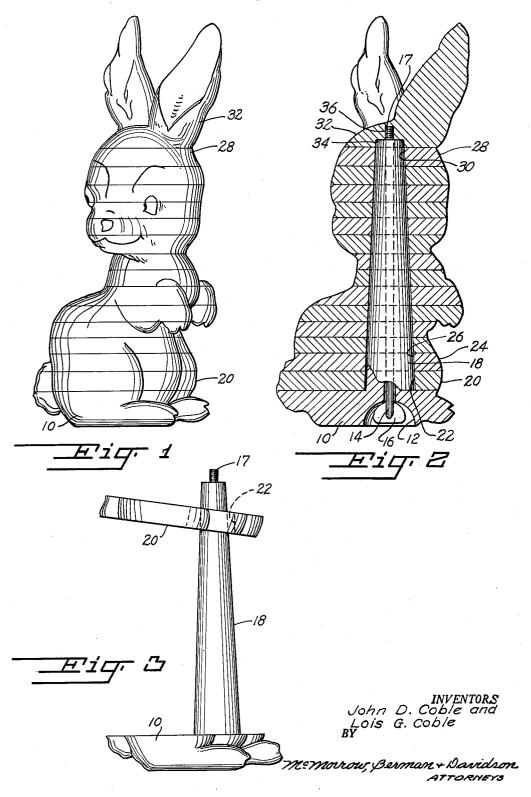
SECTIONALLY FORMED TOY

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SECTIONALLY FORMED TOY

John D. Coble and Lois G. Coble, Guilford College, N. C. Application August 14, 1953, Serial No. 374,195 1 Claim. (Cl. 273-157)

This invention relates to toys, and more particularly has 15 reference to a toy which is formed in a plurality of sections adapted to be separably assembled with one another to form a readily identifiable object.

One important object of the present invention is to provide a toy of the type stated which will be so designed as 20 to permit a small child to assemble a plurality of pieces with one another, in such a manner as to provide an end result wherein a recognizable object will take form before the child's eyes.

Another object of importance is to provide a toy as 25 stated which will have distinctive, educational advantages, in that it will provide instruction in assembling pieces with one another in a predetermined, following order to produce a desired end result.

Another object of importance is to provide a toy as 30 stated which will not only be educational, but will also be amusing, in that it will be adapted to permit the formation of any of various objects attractive to children, such as animals, houses, vehicles, etc.

Still another object is to provide a toy of the type 35stated which, after assembly of the several pieces with one another, can be adapted to receive a tie rod, used for tightly engaging the assembled pieces against relative separation, thus to preserve the completely formed toy for as long as may be desired.

Yet another object is to provide a toy of the character referred to which will be novelly designed so as to permit application of the principle on which the toy is based to the assembly of any of a large number of objects, thus to increase measurably the commercial feasibility of the as- 45 sembly set constituting the invention.

Other objects will appear from the following description, the claim appended thereto, and from the annexed drawing, in which like reference characters designate like parts throughout the several views, and wherein:

Figure 1 is a perspective view of a completed toy, assembled in accordance with the present invention;

Figure 2 is a longitudinal sectional view through said toy; and

member rigid with the base piece being shown in side elevation and one of the auxiliary pieces being illustrated as it appears when being positioned upon the core mem-

The reference numeral 10 has been applied in the several figures of the drawing to designate a base piece. In this connection, the base piece is formed in the illustrated example of the invention as the hind portion of a rabbit. It should be noted at this point, however, that a rabbit has been illustrated purely by way example, and the 65 principle of the invention can be carried out in the assembly of any of various objects, not only rabbits, but also various other animals, balls, houses, vehicles, etc.

In any event, in the illustrated example the base piece 10 has a flat underside for stabilizing the same on a supporting surface, and formed in said underside is a semi2

spherical, downwardly facing recess 12. The recess 12, at its center point, is in communication with the lower end of an opening 14, the opening 14 extending between the recess 12 and the flat upper surface of the base piece 10.

Disposable within the recess 12 is a handle 16 formed upon one end of an elongated, straight tie rod 17, said tie rod being threaded at that end thereof remote from the handle, as best shown in Figures 2 and 3. The tie rod 10 extends loosely within an end-to-end, axial bore formed in a conically shaped core member 18 integral at its lower, larger end with the upper surface of the base piece 10. The tie rod is slightly longer than the core member, so as to cause the threaded upper end of the tie rod to project a short distance above the smaller, upper end of the core member.

A plurality of auxiliary pieces are adapted to be assembled with one another in superposed relation, upon the base piece, and each of these auxiliary pieces has an outer configuration which will be such as to cause the completely assembled toy to assume the proportions of a readily identifiable object, in the present instance a rabbit. One auxiliary piece has been designated by the reference numeral 20, and has been illustrated in Figure 1 and 2 in face to face contact with the upper surface of the base piece The auxiliary piece 20 has an opening 22 so proportioned as to receive the lower end portion of the core member, the auxiliary piece fitting snugly about the core member. The opening 22 will be of tapered formation, so as to complement the conical shape of the core member, but in a commercial embodiment the tapered shape of the opening 22 may be dispensed with for the purpose of reducing the cost of manufacture.

Positioned upon the auxiliary piece 20, after said auxiliary piece has been placed upon the base piece, is a second auxiliary piece designated by the reference numeral 24 having an opening 26 receiving the core member. After the auxiliary piece 24 has been placed upon the auxiliary piece 20, additional auxiliary pieces can be assembled with one another, about the core member, in superposed relation. Each auxiliary piece will have a particular outer configuration adapted to cause the same to merge at its periphery into the periphery of the auxiliary pieces immediately adjacent thereto.

The auxiliary pieces are stacked in superposed relation, in the manner referred to above, with that auxiliary piece next to the uppermost piece being designated by the reference numeral 28 and having a relatively small opening 30. After the auxiliary piece 28 has been positioned upon the core member, the uppermost piece, designated by the reference numeral 32, is positioned upon the upper end of the core member. The uppermost piece has a downwardly facing recess 34 receiving the upper end of the core member, said recess 34 merging into a small Figure 3 is a perspective view of the base piece, a core 55 diameter, threaded socket 36 in which is engageable the upper end of the tie rod.

It will be understood that after all the pieces are assembled in the manner illustrated, the tie rod can be rotated by grasping of the handle and turning of the same within the recess 12. When the tie rod is rotated, the end piece 32 will be held against rotation, and as a result, the several pieces will be tightened in contact with one another to complete the formation of the toy.

The fact that the core member is conically shaped will, of course, permit the several auxiliary pieces to be formed with openings of different diameters. This aids the child in choosing the auxiliary pieces, so as to facilitate the assembly thereof in the predetermined, following order. To make the assembly more difficult, of course, the core member could be of constant diameter from end to end thereof, with the core member receiving openings of the auxiliary pieces all being of a common diameter. In such an instance the child would have to rely entirely upon the selection of the auxiliary pieces according to the outer configuration thereof, in assembling said auxiliary pieces in superposed relationship.

It will be understood that if desired, the aperture of a piece could be of non-circular cross section, so as to prevent relative rotation of the several auxiliary pieces after they are assembled with the core member. This is considered to be sufficiently obvious as not to require special illustration herein. When the core member is formed to a circular cross section, of course, the assembly of the toy is rendered somewhat more difficult, since the child must register the peripheral edges of the auxiliary pieces with one another with care and by conscious effort.

It is believed apparent that the invention is not necessarily confined to the specific use or uses thereof described above, since it may be utilized for any purpose to which it may be suited. Nor is the invention to be necessarily limited to the specific construction illustrated and described, since such construction is only intended to be illustrative of the principles of operation and the means presently devised to carry out said principles, it being considered that the invention comprehends any minor change in construction that may be permitted within the scope of the appended claim.

What is claimed is:

A toy of the sectionally formed, identifiable object type comprising: a base piece having a flat underside for stabilizing the same on a supporting surface; a core member rigid with and extending upwardly from said base

piece, said core member being conically formed from end

to end thereof to provide a progressive reduction in the diameter of the core member in the direction of its upper end; a plurality of auxiliary pieces each having an aperture for receiving said core member and adapted to be stacked thereon to form said identifiable object, the apertures of the respective auxiliary pieces being of different diameters for snug engagement of the auxiliary pieces about the core member with the changing diameter of the core member and the different diameters of the apertures providing visual means for determining the order in which the auxiliary pieces are to be assembled with one another about the core member, said base piece and auxiliary pieces cooperating when assembled with one another to complete the formation of said recognizable object; and tie 15 rod means loosely extending longitudinally through the core member and engageable at one end with the base piece, said tie rod means being engageable at its other end with that auxiliary piece furthest from the base piece, thus to provide means for holding the several pieces assembled

References Cited in the file of this patent UNITED STATES PATENTS

787,320	Arthur Apr. 11, 1905
937,225	Burr Oct. 19, 1909
2,249,124	Frye July 15, 1941
2,475,306	Beder July 5, 1949
2,493,697	Raczkowski Jan. 3, 1950
	FOREIGN PATENTS
482,946	Great Britain Apr. 4, 1938