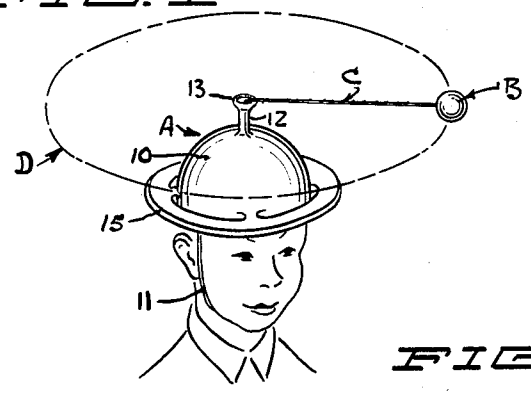
Nov. 1, 1960 I. W. SCHMAHL ET AL 2,958,156

TOY OR NOVELTY HAT

Filed July 21, 1959

FIG. 1



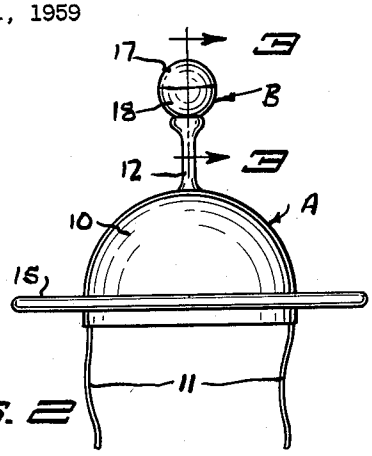


FIG. 2

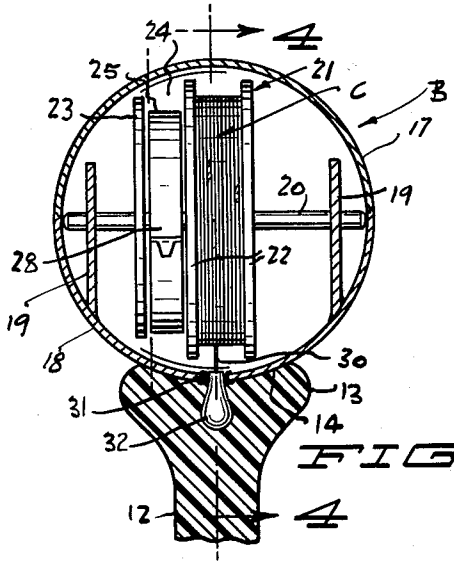


FIG. 3

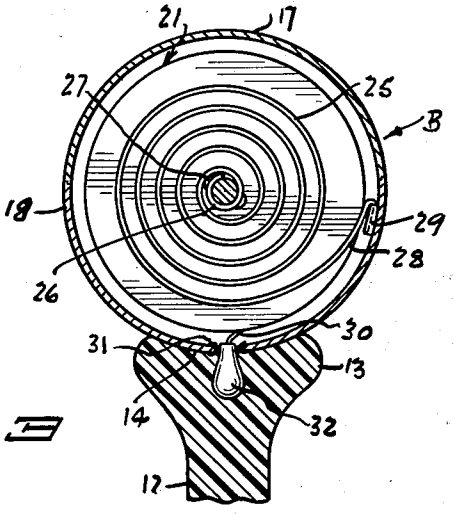


FIG. 4

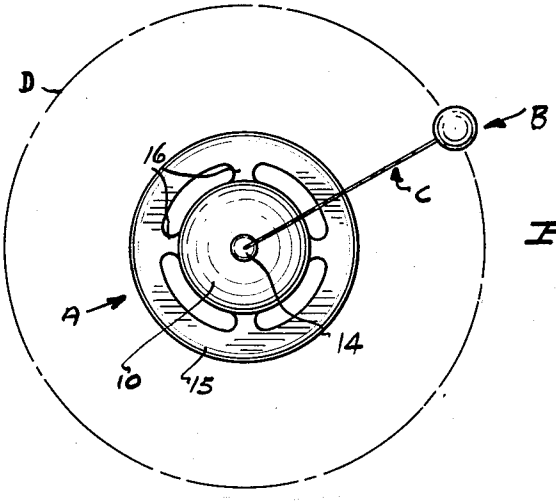


FIG. 5

INVENTORS
IRVIN W. SCHMAHL
BY EARL H. SCHMAHL

Carlson & Hazle
ATTORNEYS

United States Patent Office

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TOY OR NOVELTY HAT

Irvin W. Schmahl and Earl H. Schmahl, both of Box 233, Madison Lake, Minn.

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1 Claim. (Cl. 46—51)

This invention relates generally to toys and novelties for the use and enjoyment of young people, and the primary object of our invention is to provide a toy or novelty hat which will not only be entertaining to youngsters but which will also be educational at least to some extent.

A further object of the invention is to provide a hat or helmet to be worn on the head of the user and associated with which is a planetary element connected by an extensible, spring retracted tether to the hat but adapted to be driven and motivated into an orbital path by a rolling, rotating movement of the head about the upright axis of the wearer's neck. Thus the hat may simulate a space station from which is launched a satellite to travel in orbit about said station, said satellite being, of course, the planetary element before mentioned and which normally will rest in a centered position atop the hat but which is placed into orbit by movement of the head as also stated. Since said planetary element is normally retracted to its centered position atop the hat by action of the spring biased tether or flexible cord connecting the element to the hat the diameter of the orbit into which the element is flung will be determined by the vigor with which the head is moved to maintain said element in its "flying" condition. This not only places a premium upon the vigor and dexterity of the head movements, as is necessary to maintain the interest of young people in such toys, but the action as a whole will serve to teach the user something of the nature and egects of centrifugal forces, by varying the head movement the satellite may be caused to travel in other than circular orbits about the hat, teaching the user and his companions the differences between the terms apogee and perigee as just two examples of the technical terminology brought into common usage by the recent advances in space exploration and rocket travels.

These and other more detailed and specific objects will be disclosed in the course of the following specification, reference being had to the accompanying drawings, in which—

Fig. 1 is a perspective view of our toy or novelty with the hat on the head and the satellite in flight, the orbit of the latter being indicated in broken lines.

Fig. 2 is an enlarged frontal elevation, the satellite being in its normal or rest position.

Fig. 3 is an enlarged fragmentary vertical sectional view on the line 3—3 in Fig. 2.

Fig. 4 is another sectional detail but on the line 4—4 in Fig. 3.

Fig. 5 is a plan view, the satellite being shown in its in flight position and the orbit in broken lines.

Referring now more particularly and by reference characters to the drawing, A designates generally the central component or "space station" to be worn on the person of the youngster using the toy and B indicates generally the movable, planetary element or satellite to

be urged into orbit by proper actuation of element A, these two main components or elements being connected together by a restraining tether C.

In the preferred embodiment here chosen to illustrate our invention the element A includes a hat or helmet 10 shaped and sized to fit over the upper part of the wearer's head as clearly seen in Fig. 1 and provided, if desired, with a chin strap or straps 11 adapted to fit beneath the wearer's chin and thus hold the hat in place. At the upper center of the hat 10 there is an upwardly extending stem 12 enlarged at its upper end 13 and formed with a shallow depression or seat 14 (Figs. 3 and 4) to normally seat and serve as a rest for the satellite element B. This seat 14 represents, and is intended to simulate in the imagination of the user of the toy, a space station or launching pad for the sattelite B and to lend to the appearance or to the aura of space travel and its paraphernalia the rim of the hat 10 is formed with a ring 15 of larger diameter connected to the hat by spokes 16 (Fig. 5).

The satellite or planetary element B in its illustrated form is spherical and hollow, being made up of upper and lower snap or otherwise suitably connected hemispherical sections 17 and 18. In the latter there are suitably provided opposed bearings 19 (Fig. 3) in one way or another designed to rotatably support a shaft 20 upon which is secured a spool or reel 21 having circular flanges or sides 22 spaced apart along the axis of the shaft. At one side a third flange 23 is secured to the shaft 20 in spaced relation to the adjacent spool flange forming an intervening space 24 for a light torsional or spinal spring 25 the inner end 26 (Fig. 4) of which is secured as by rivet 27 to the shaft while the opposite outer end 28 is secured by a lug 29 or otherwise to the inside of the lower section 18 of element B. The spring 25 thus tends to bias the shaft 20 to rotate in one direction in such fashion as to normally wind up the aforesaid tether element C upon the spool 21. Said tether element C as here shown is a suitable length of flexible cord secured to the spool but having an end portion 30 passed through a smooth guide opening or grommet 31 in the center of the lower part of the satellite element B so that this end of the cord may be fastened to the element A. Preferably this end of the tether or cord is secured to a swivel 32 held in the upper end of stem 12 centered with respect to the aforesaid shallow seat 14 therein. Obviously the spring 25 thus tends to wind the tether on the spool 21 and bring the element B inwardly to said seat 14 the tether in effect being thus longitudinally, yieldably retractable. The elements A and B may both be made of suitable plastic molded to shape and in any colors desired but we do not, of course, limit ourselves to such material.

When in use the element B will normally rest in its seat 14 or launching pad (Fig. 2) but the wearer may, by a rotating motion of his head, create leverage and centrifugal force enough to cast the sattelite element B (having sufficient weight for the purpose) out into an orbital path D (Figs. 1 and 5) the diameter of which will be determined, other things being equal, by the vigor with which the child moves its head and the magnitude of the resulting centrifugal force caused to influence the satellite. Not only will the size of the orbits thus be an indication of scoring abilities of a number of children playing together but also they will learn of the creation and effects of centrifugal force and by skillful maneuver may vary the flight or orbit to other than a true circle and thus simulate the flight of present satellites as they approach and pass their apogee and perigee, all as aforesaid.

It is understood that suitable modifications may be

made in the structure as disclosed, provided such modifications come within the spirit and scope of the appended claim. Having now therefore fully illustrated and described our invention, what we claim to be new and desire to protect by Letters Patent is:

In a toy of the character described, a hat adapted to be worn on the head and including an upwardly projecting stem having a shallow seat in its upper end, a hollow spherical member simulating a satellite adapted to rest in said seat, a flexible tether cord connected at the center of the seat, a rotary spool in the said member upon which said cord is wound, and a spring yieldably

biasing the spool to rotate and wind up the cord but permitting the spool to unwind the cord and the member to assume an orbital path about the hat as the wearer of the latter moves the head and creates centrifugal forces effective on said member.

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