United States Patent [19]

Ackeret

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[54] **MONEY BOX**

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[52] **U.S. Cl.**..... **232/4 R,** 116/125 G, 206/DIG. 29

[51] **Int. Cl.**..... **A47g 29/00**

[58] **Field of Search** ..... 232/4, 5, 6; 46/2, 46/3, 4; 116/130, 131, 133, 114; 133/8 B, 1; 206/56 AC, DIG. 29, .82, .83, .84; 40/111, 114

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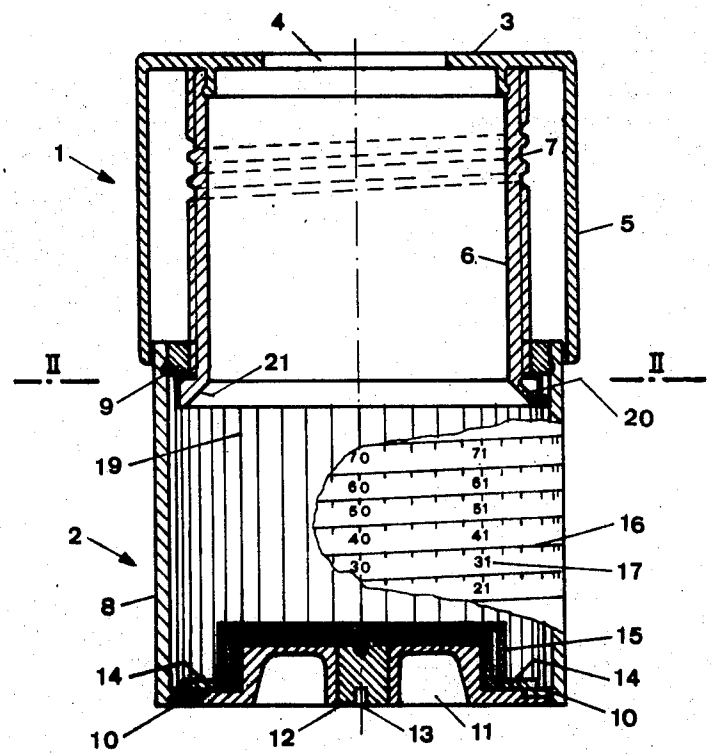
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[57] **ABSTRACT**

A money box with hollow telescoping container members threaded onto each other and one member having a helical scale with the same pitch as the pitch of the interconnecting thread, and scale numbers on the threads with decimal divisions around the periphery of the helical scale, and numbers differing by the value 10 being disposed in axial aligned and superposed relation with each other.

5 Claims, 6 Drawing Figures



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SHEET 1 OF 2

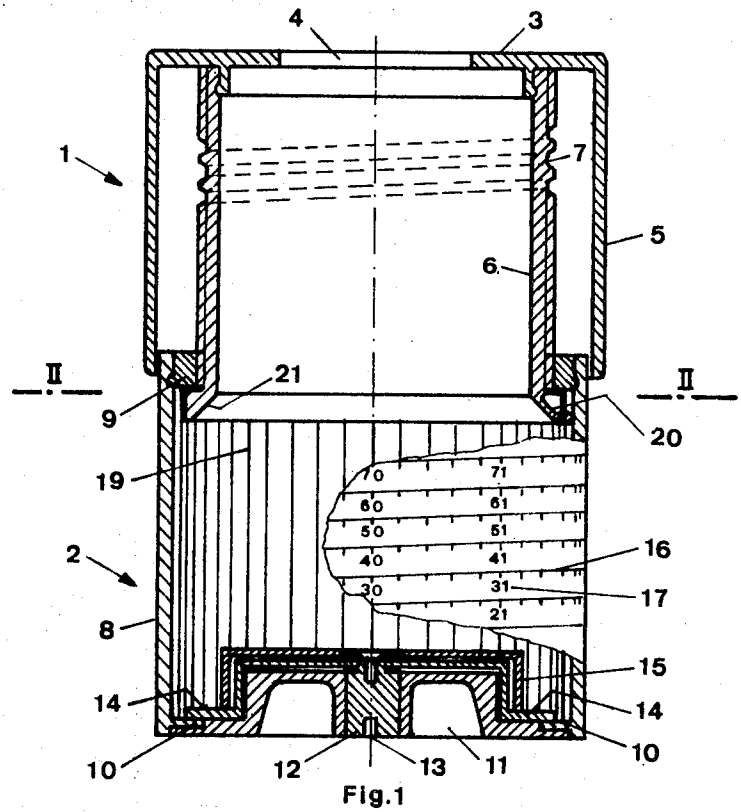


Fig.1

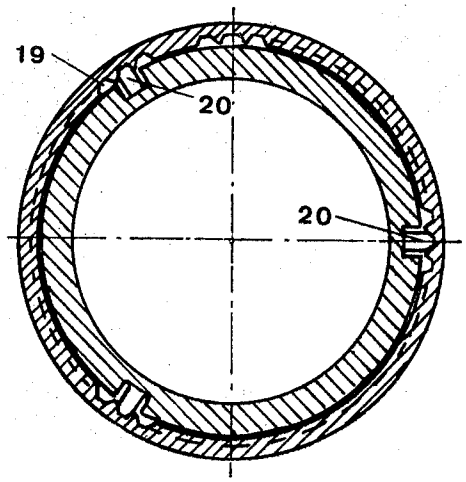


Fig.2

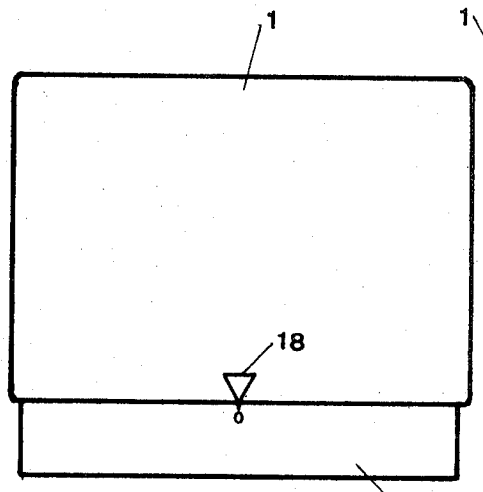


Fig. 3

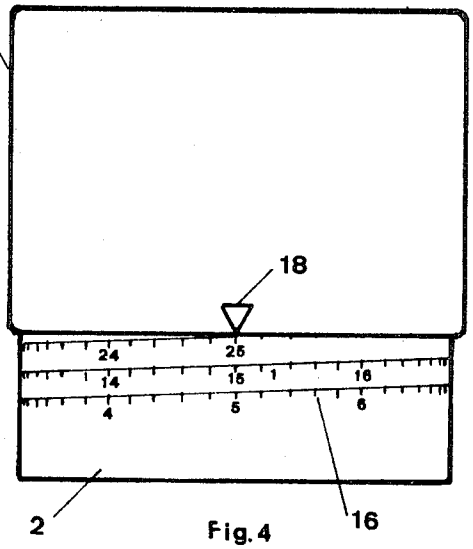


Fig. 4

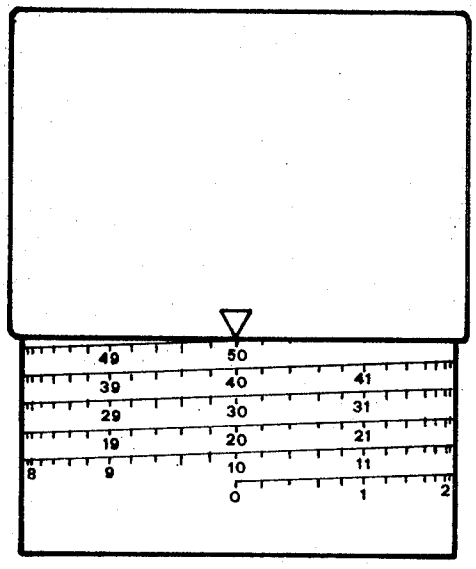


Fig. 5

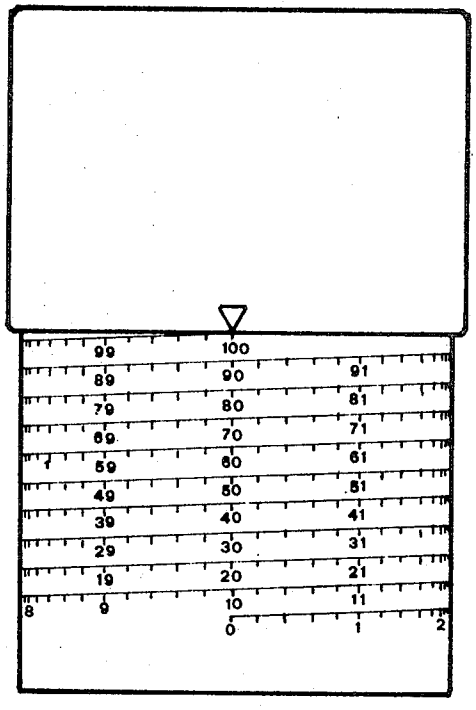


Fig. 6

MONEY BOX

BRIEF SUMMARY OF THE INVENTION

The invention relates to a money box comprising a lockable container provided with an insert slot, and in particular to a money box to be used by children.

Presently money boxes of the mentioned type are hardly suited to reinforce children's attitude to save money because once the coin having been slipped through the slot, it disappears and but the sound upon shaking of the box may indicate the total amount already accumulated.

Other known types of money boxes consist of a transparent tubular container closed at both ends and having an internal diameter adapted to a certain coin size. The coins slipped through a slot at one container face superpose each other to form a column the height of which corresponding to the total accumulated being read at a scale extending along the container.

This type of money box, however, is of but little value due to its being calibrated for a certain coin size in a certain currency.

It is the object of the present invention to provide a money box in which the drawbacks of the known types of money boxes are eliminated and which is likewise a playmate for the children introducing them into the world of money and of calculation in general.

The money box comprising a lockable container provided with an insert slot is, according to the teaching of the invention, characterized in that the container consists of two telescopic members threadedly engaging each other, one of the container members being provided at its circumference with a helical scale having a pitch identical with that of the container thread, the other container member being provided with a mark identifying scale readings, the scale being provided with numbers forming a number sequence which increases with a movement of said container members from each other.

Each time a child inserts a coin into the box, he will be permitted to move the container members relative to each other so that the mark identifies the new value of the accumulated total amount enclosed in the box. Simultaneously, the height of the box "grows" with said total and may be compared with that of others. The adjustment of the scale reading teaches the children the basic mathematical operations once the meaning of the ciphers has been comprehended.

Preferably, the money box is further characterized in that the scale is provided circumferentially with a decimal division, one thread turn being divided in ten units and numbers differing by the value ten being disposed axially aligned and superposed on said helical scale. This particular feature teaches the fundamentals of the decimal system by correlation of the local position of the individual figures, the unit ciphers reappearing each on individual number columns.

Another feature of the invention is characterized in that the two container members are provided with indexing means operable at positions of individual values of the scale. The indexing means serve to accurately adjust and maintain the respective relative position of the container members.

The invention will be described in detail with reference to the accompanying drawings illustrating a preferred embodiment of the invention, it being understood that the scope of the invention should not be limited thereby, in which:

FIG. 1 shows an axial section, partly in elevation, of a preferred embodiment of the money box according to the invention;

FIG. 2 is a radial section at level II—II of FIG. 1; and

FIGS. 3 – 6 illustrate various relative positions of the two container members corresponding to values 0, 25, 50, and 100.

DETAILED DESCRIPTION OF INVENTION

The money box shown in the drawings comprises an upper container member 1 and a lower container member 2. The upper container member 1 consists of a top wall 3 provided with the insert slot 4, a cylinder wall 5, and of a cylindrical thread portion 6. Thread portion 6 having a male thread 7 is secured to top wall 3 in any suitable manner. The lower member 2 comprises a cylindrical wall 8 provided at its upper end with a female thread annulus 9 mating with the male thread 7. A flange 10 is formed at the lower end of wall 8 serving to hold a removable bottom wall 11. In the present embodiment, a hub 12 is journalled centrally in bottom wall 11, hub 12 carrying arms 14 and being provided with a keyhole 13. A cup member 15 is mounted in any suitable manner on bottom wall 11 and serves to hold hub 12 and to guide arms 14. At its lower edge, cup member 15 is provided with indentations each for one arm 14 so permitting and limiting rotational movement of hub 12 with arms 14. When closing the container by mounting bottom wall 11 in the container member 2, arms 14 may pass through cut-out slits in flange 10 mating therewith in circumferential position. The hub may thereafter be rotated by means of a key in the keyhole 13 such that arms 14 will engage behind those portions of flange 10 where the latter was not cut out. Thus, the bottom wall 11 is firmly held in closed position.

The cylindrical wall 8 of the lower container members 2 is provided circumferentially with scale line 16 helically extending around and up the member 2 and carrying number 17. The scale pitch, i.e., the distance spacing adjacent line turns, is identical to the pitch of thread 7. Scale readings are identified by a mark 18 provided at the lower edge of wall 5 of the upper container member 1. Thus, mark 18 moves along scale line 16 upon and synchroneously with relative movement of container members 1 and 2.

Cylindrical wall 8 of the lower container member 2 is interiorly provided with axially extending grooves 19 engaged by resilient blades 20 formed at the lower edge of thread portion 6. Blades 20 form parts of a chamfered expanding flange 21 serving the purpose to prevent coins from engaging through portion 6 and wall 8 upon threading together members 1 and 2. Likewise, flange 21 serves as stop means preventing complete separation of members 1 and 2.

When assembling the container, thread portion 6 is pushed into member 2 and the female thread annulus 9 is fixed on the latter simultaneously engaging the threads of portion 6 and annulus 9. Finally, top wall 3 of member 1 is mounted on thread portion 6, such that when the latter is completely threaded into annulus 9, mark 18 indicates the start point of helical line 16.

Grooves 19 and blades 20 form together an indexing system correlated to the circumferential scale pitch. As shown, scale line 16 is divided in a decimal system so that one turn of member 1 with respect to member 2

makes mark **18** pass along 10 units. Thus, adjacent number **17** located underneath each other in axial columns differ by 10 units; in the last digit, they are identical.

FIG. **3** shows the money box after assembly, mark **18** pointing to value 0 of the scale. Each inserted coin value may be numerically added at scale line **16** by the child, FIGS. **4 – 6** illustrating the increasing axial dimension of the container corresponding to the increasing accumulated amount of money. The fact that numbers having idential ciphers in their last digit are found on one and the same column of superposed numbers (e.g., **1, 11, 21 . . .**) facilitates comprehension of the decimal system; the child will like better to save his money with the money box according to the invention because of its versatile and fascinating properties to be discovered by the child.

What is claimed is:

1. A money box for currency of various denominations, comprising:

a extensible and retractable container with an insert slot for currency of various denominations and lockable means to obtain access into the container for removal of money therefrom, said container including a pair of upper and lower hollow members telescopically assembled with each other and having the interiors thereof in open communication with each other, said hollow members being relatively rotatable and threadedly interconnected for progressively varying the length and interior capacity of the container,

one of the hollow members having a progressively numbered helical scale with a pitch identical to the pitch of the inter-connecting thread, and

the other of the hollow members having a marker adjacent the scale and moving therealong as the hollow members are rotated.

2. The money box according to claim **1** and said scale being provided with numbers and decimal divisions, one thread turn being divided in 10 units and numbers differing by the value 10 being disposed in axial alignment with each other and superposed on said helical scale.

3. The money box according to claim **1** and including cooperating mechanical means on said relatively rotatable members and releasably retaining said rotatable members against relative rotation with respect to each other at a multiplicity of positions around the peripheries thereof.

4. A money box for currency of various denominations, comprising:

an extensible and retractable container with an insert slot for currency of various denominations and lockable means to obtain access into the container for removal of money therefrom, said container including a pair of upper and lower hollow members telescopically assembled with each other and having interiors in open and unobstructed communication with each other, said upper and lower hollow members being relatively rotatable and having peripheral walls movable along each other, the upper hollow member having internal concealed threads formed along the length of a confined peripheral wall surface and said lower hollow member also having thread means interfitting with the concealed threads of the upper member and producing relative endwise movement of said hollow members in response to relative rotation therebetween,

one of the peripheral walls of the upper and lower hollow members encompassing a second of the peripheral walls and having a marker adjacent the edge thereof,

the second of such peripheral walls having a progressively numbered helical scale with decimal divisions and said scale being covered by the encompassing wall and being uncovered upon relative rotation of the members to progressively expose additional numbers of the scale to display an accumulated total,

the helical scale having a pitch identical to the pitch of said concealed threads, and said scale being divided into ten numbered units in each convolution whereby numbers differeing by the value ten are disposed in axial alignment along the helical scale, and

yieldable detent means confined and concealed by the peripheral walls of the container and releasably retaining the rotatable upper and lower members against relative rotation with respect to each other at a multiplicity of positions corresponding to the numbered divisions on the scale.

5. The money box according to claim **4** and wherein said upper hollow member has an inner depending threaded peripheral wall extending into the lower member and formed with the threads on the exterior peripheral face thereof, said upper member also having an outer depending peripheral wall spaced outwardly from said inner wall and surrounding the peripheral wall of the lower hollow member, the outer depending wall of the upper member carrying said marker, and the peripheral wall of the lower hollow member carrying said helical scale on the exterior peripheral face thereof.

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