Aug. 10, 1943. E. SCHWARTZ 2,326,397

ANIMATED PICTURE DEVICE

Filed Sept. 28, 1942

Fig. 1.

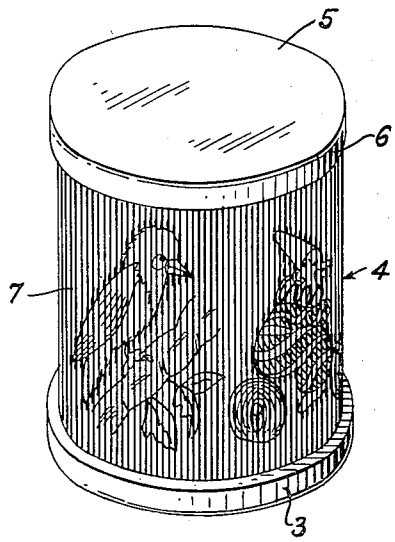


Fig. 3.

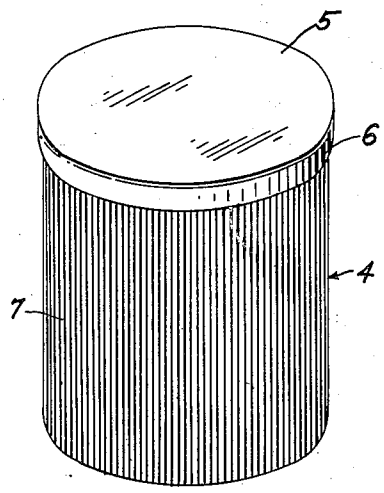


Fig. 2.

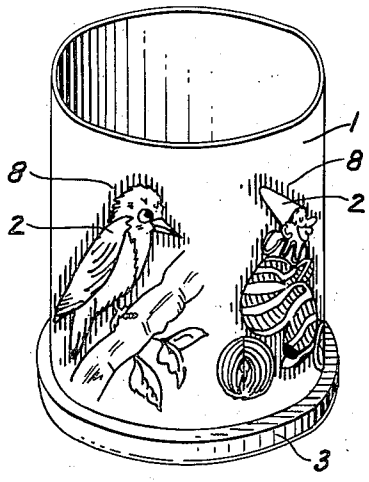
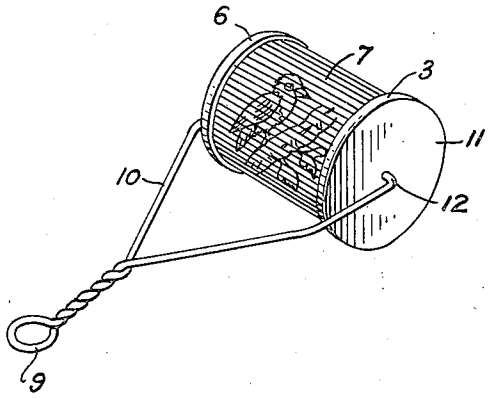


Fig. 4.



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ANIMATED PICTURE DEVICE

Edward Schwartz, Hollywood, Calif.

Application September 28, 1942, Serial No. 459,942

10 Claims. (Cl. 46—36)

This invention relates to printed pictures, drawings, or photographs, which are formed in whole or in part of ruled lines which cooperate with a similarly ruled transparent slider for imparting the semblance of animation to the picture when viewed through the slider as the same is moved back and forth across the picture, and the invention has for its objects a novel arrangement of the parts of such pictures whereby a smoother operation of the same is obtained and the arrangement is adaptable for use as containers and also for children's toys and other purposes.

In such pictures as heretofore made the pictures were generally on a flat piece of paper or cardboard and the ruled slider was on a transparent flat sheet of Celluloid or the like, and as neither the paper nor the Celluloid were absolutely flat the two sheets, that is, the picture and the slider did not make a good contact at all points, but in fact was generally spaced appreciably in some areas so that an undersirable wavy effect in the picture resulted when the slider was operated.

In working to improve such pictures I have discovered that if the pictures were printed on or mounted on a cylindrical surface, and the transparent ruled slider likewise formed to cylindrical shape to telescopically fit nicely over the picture bearing cylinder, and with both cylinders projecting respectively at opposite ends so that either cylinder could be turned relative to the other one, the nicely fitting telescoped cylinders would insure an even close contact of the ruled sheet and picture bearing sheet at all times and a smoother action picture than heretofore obtained.

In the drawing accompanying this application the improvement is shown as taking the form of a cylindrical cardboard box, and with the lid provided with a cylindrical transparent ruled wall outwardly embracing the inner cylindrical container shell, the outer surface of which bears the pictures.

In Fig. 1 the cylindrical box is shown in perspective in assembled, closed position.

Fig. 2 is a perspective view of the inner shell or container portion of the box with the pictures on its outer cylindrical wall.

Fig. 3 is a perspective view of the outer transparent ruled cylindrical shell shown detached from the box portion of Fig. 2.

Fig. 4 is reduced size perspective view of the device made up as a child's toy.

In further detail the inner cylinder 1 (see Fig. 2) which bears on its outer surface one or more pictures 2, may be of sheet metal, cardboard, paper, or plastic, in the form of a can or pasteboard box open on top and closed on the bottom so as to form a container for any desired commodity, and it may have a projecting bead or rim 3 around its lower end.

The outer cylindrical shell 4 (see Fig. 3) is of thin transparent material such as Celluloid, "Cellophane," plastic, or even thin glass, and is preferably provided with a closed upper end 5 and also, but not necessarily, with a projecting bead or rim 6 around its upper end.

Cylinder 4 is vertically ruled with spaced long lines 7, preferably black, tho any more or less opaque color will do, and the pictures 2 on the outer surface of the inner cylinder are also ruled in places 8 with similar spaced short lines to cooperate with the ruled lines 7 of the outer cylinder 4 so that when the two cylinders are fitted together with the transparent ruled one 4 outwardly embracing the inner one 1, and the cylinders are relatively turned, as by gripping the extreme rims 3 and 6, each in one hand, and twisting in opposite directions, the pictures will show an effect of movement or animation, and owing to the perfect fit easily obtained by the use of the cylindrical construction of the relatively movable parts, and especially by reason of the resilient hugging nature of the contact if the outer shell is of thin flexible material, the effect may be extended over a considerable area without any vague spots as generally formed in this type of animated picture made on flat surfaces.

Of course, the pictures 2 may be preferably first printed on the flat material before the box or can 1 is made up, or they may be on paper pasted thereto. Also while I indicate the pictures 2 with some portions only with ruling 8, the entire picture may be composed of parallel ruling in the well understood way to depict different positions as the alternate lines are covered and uncovered as the ruled cylinder 4 is revolved or turned part way back and forth relative to the inner box. Also the picture rulings may be at various angles and also the rulings of the outer cylinder to get various effects if desired.

While I prefer the provision of rims or beads 3 and 6 to afford a better gripping place for the fingers to turn either shell 1 or 4 relative to the other, still, it may be dispensed with if the inner shell project sufficiently below the outer one to provide means whereby the fingers can grasp or hold it, or other equivalent means be provided for the purpose.

The device in the form shown in Fig. 1 forms a container with the outer shell providing the outer cover, but the two assembled cylinders may be mounted on a handle 9 formed with a fork 10 one end of which is rotatably extended into the end wall 11 of the inner cylinder 1, as indicated at 12, and the other end is rotatably extended into the end wall 5 of the outer cylinder 4 as indicated, all so that as a child rolls the device along the floor the pictures will appear to move or be animated. As it is necessary for relative movement of the cylinders to take place this may be obtained by making one side of the fork a slightly greater frictional fit in its rotative connection to the cylinder than the other fork, or fixed in place, or both can be perfectly free and one rim 3 or 6 be slightly larger than the other. For such use of the invention the pictures preferably should "read" for the child operating the toy.

From the above explanation it will be seen that the invention lends itself to various rotatable devices and toys, also that the inner or picture carrying cylinder or its pictures may be transparent or translucent so that they may be viewed against a light such as an electric bulb within the inner cylinder, and thus constitute a lamp shade, as either or both end walls may be omitted. Many other uses for the invention might be mentioned.

Also to be noted is that for the transparency type it is immaterial which cylinder carries the picture and which carries the ruling.

I therefore claim:

1. An animated picture device comprising an inner cylinder carrying a picture on its surface, an outer cylinder of transparent flexible material rotatably, and closely contacting and snugly embracing the inner cylinder in covering relation to said picture and provided with spaced long lines through which the picture is viewed, and said picture having at least a part of its outline fringed with a series of short, parallel spaced lines cooperating with the spaced lines of the outer cylinder to yield a semblance of movement to the picture when the cylinders are turned relatively.

2. An animated picture device comprising an inner cylinder carrying a picture on its surface, an outer cylinder of transparent material rotatably embracing the inner cylinder in covering relation to said picture and provided with spaced lines through which the picture is viewed, and said picture having a part formed of spaced lines cooperating with the spaced lines of the outer cylinder to yield a semblance of movement to the picture when the cylinders are turned relatively, said cylinders each being closed with a wall at one end only and telescoped together to form a container with removable cover.

3. An animated picture device comprising an inner cylinder carrying a picture on its surface, an outer cylinder of transparent material rotatably embracing the inner cylinder in covering relation to said picture and provided with spaced lines through which the picture is viewed, and said picture having a part formed of spaced lines cooperating with the spaced lines of the outer cylinder to yield a semblance of movement to the picture when the cylinders are turned relatively, said cylinders each being closed with a wall at one end only and telescoped together to form a container with removable cover, and a gripping bead or rim around the outer end of one of said telescoped cylinders.

4. An animated picture device comprising an inner cylinder carrying a picture on its surface, an outer cylinder of transparent material rotatably embracing the inner cylinder in covering relation to said picture and provided with spaced lines through which the picture is viewed, and said picture having a part formed of spaced lines cooperating with the spaced lines of the outer cylinder to yield a semblance of movement to the picture when the cylinders are turned relatively, said cylinders each being closed with a wall at one end only and telescoped together to form a container with removable cover and a gripping bead or rim around the outer end of both of said telescoped cylinders.

5. An animated picture device comprising an inner cylinder carrying a picture on its surface, an outer cylinder of transparent material rotatably embracing the inner cylinder in covering relation to said picture and provided with spaced lines through which the picture is viewed, and said picture having a part formed of spaced lines cooperating with the spaced lines of the outer cylinder to yield a semblance of movement to the picture when the cylinders are turned relatively, said cylinders each being closed with a wall at one end only and telescoped together to form a container with removable cover and a gripping bead or rim around the outer end of both of said telescoped cylinders, one of the rims being smaller in diameter than the other.

6. An animated picture device comprising an inner cylinder carrying a picture on its surface, an outer cylinder of transparent material rotatably embracing the inner cylinder in covering relation to said picture and provided with spaced lines through which the picture is viewed, and said picture having a part formed of spaced lines cooperating with the spaced lines of the outer cylinder to yield a semblance of movement to the picture when the cylinders are turned relatively, said cylinders each being closed with a wall at one end only and telescoped together to form a container with removable cover and a gripping bead or rim around the outer end of both of said telescoped cylinders, one of the rims being smaller in diameter than the other, and a handle rotatably mounting the nested cylinders adapting same to be rolled along the floor to cause relative turning of the cylinders.

7. In a structure, as set out in claim 1, the pictures on the inner cylinder being transparencies adapted to be viewed against a light within the inner cylinder.

8. An animated picture device comprising a pair of cylindrical shells one revolvably fitting within the other, said shells being in close contact and at least one of them being of thin flexible material, a picture on the cylindrical wall of one of the cylinders formed at least in part with spaced short rulings, and spaced long rulings on the other cylinder arranged to cooperate with the rulings of the picture to give the effect of animation thereto when the cylinders are turned relatively.

9. An animated picture device comprising a pair of cylindrical shells one revolvably fitting within the other, a picture on the cylindrical wall of one of the cylinders formed at least in part with spaced rulings, and spaced rulings on the other cylinder arranged to cooperate with the rulings of the picture to give the effect of animation thereto when the cylinders are turned relatively, and a handle connected to

said cylinders in a manner for rolling same on the floor to cause relative movement of the cylinders.

10. An animated picture device comprising a picture depicting an object to which the effect of motion is desired to be imparted, a series of short spaced parallel lines printed about the outline only of said object, and a transparent thin flexible sheet covering said picture printed with spaced long lines adapted to cooperate with the short spaced lines of said picture to give the effect of animation to said object when the lines of the flexible sheet are moved transversely of the short lines about said object.

EDWARD SCHWARTZ.