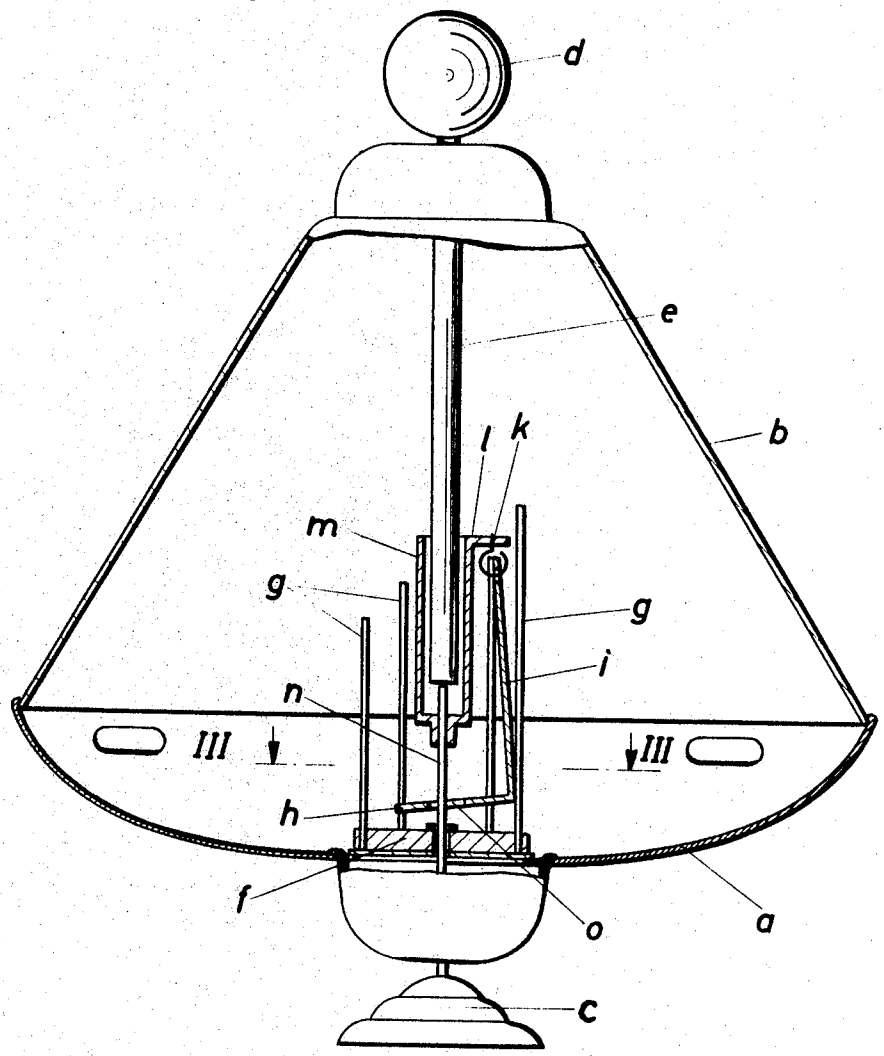
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MUSICAL TOP

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Fig.1



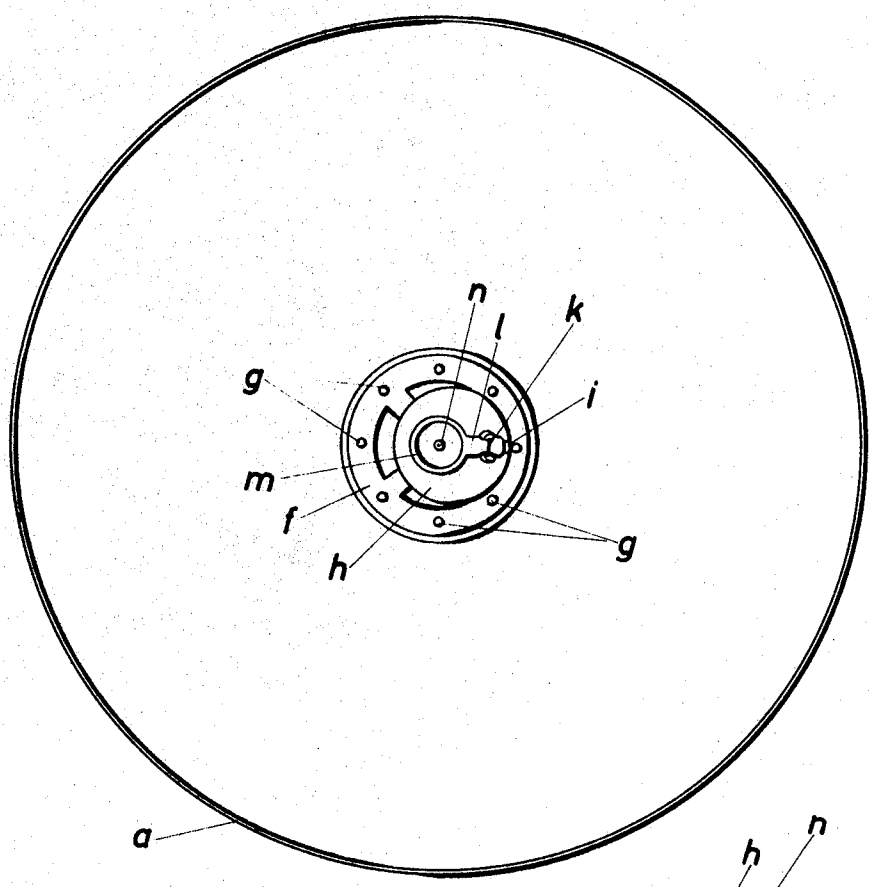
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Sept. 5, 1967 F. FUCHS 3,339,445

MUSICAL TOP

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Fig.2



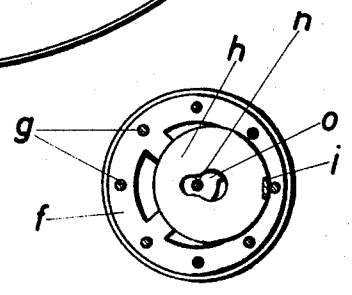


Fig.3

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MUSICAL TOP

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12 Claims. (Cl. 84—406)

The present invention relates to a musical top, and particularly to a top having a dished or cup-shaped bottom part and a generally frustoconical, preferably transparent upper part. Musical tops of this kind as heretofore known comprise a sound-producing means which is disposed in the bottom part of the top and covered with a partition disk separating the bottom part from the upper part. The sound-producing means are generally actuated by the air flow produced when the top is spun.

It is an object of the present invention to provide a novel and improved musical top in which sounds are produced by a swingably suspended clapper striking chime bars mounted in the top body in mutually parallel relationship.

It is also an object of the invention to provide a novel and improved musical top of the general kind above referred to in which a sequence of different sounds is produced by means of chime bars of different lengths. A simple melody can be produced by selecting appropriate variations in the length, the thickness and the material of the bars.

The aforementioned objects, features and advantages and other objects, features and advantages which will be pointed out hereinafter may be attained by mounting the chime bars on a mounting plate, preferably in a cagelike arrangement, and securing the mounting plate on the bottom part of the top for rotation in unison therewith, preferably coaxially with the rotational axis thereof. The clapper coacting with the chime bars is eccentrically suspended to subject the clapper to the centrifugal force when the top is spun. The clapper may comprise an annular disk which is secured at its outer rim to a rod which is swingably supported at its other end at a point radially spaced apart from the rotational axis of the top. The annular disk is preferably disposed so that it encompasses the rotational axis of the top. The rod supporting the disk may be swingingly supported on a lateral arm of a stationarily mounted support member, which in turn is secured to a stand for the top. More specifically, the mounting member may be in the form of a sleeve supported by a bar secured to the stand, so that the entire clapper assembly does not participate in the rotation of the top.

In the accompanying drawing a preferred embodiment of the invention is shown by way of illustration, and not by way of limitation.

In the drawing:

FIG. 1 is an elevational sectional view of a musical top according to the invention;

FIG. 2 is a plan view of FIG. 1, the upper part of the top being removed for clarity of illustration; and

FIG. 3 is a section taken on line III—III of FIG. 1.

Referring now to the figures in detail, the exemplified musical top comprises a dished bottom part *a* and a generally frustoconical upper part *b* preferably made of a suitable transparent plastic. The top body formed by bottom part *a* and upper part *b* is mounted on a stand *c* rotatable in reference thereto about a vertical rotational axis when the stand is placed on a suitable horizontal base.

The top body may be spun by actuating a suitable and conventional spinning mechanism, digrammatically indicated by a knob *d* and a tube *e*. The tube should be visualized as including a helically twisted bar secured to knob *d* and engaged with a nut fixedly secured on the

upper part *b*. As is well known, up and down pumping of the bar by means of knob *d* will produce the desired spinning motion of the top body. The spinning mechanism as such does not constitute part of the invention, which will now be discussed in detail.

A mounting plate *f* is suitably secured in the bottom part *a* for rotation in unison therewith about the rotational axis of the top, which, as is evident, coincides with the longitudinal axis of tube *e*. Mounting plate *f* supports several chime bars *g* which are circumferentially disposed about the rotational axis of the top, as is clearly shown in FIGS. 2 and 3, so that the bars define a cage encompassing the rotational axis. The bars are made of a suitable metal or other material capable of producing well defined sounds when struck and are disposed in mutually parallel relationship. As is shown, the bars preferably differ in length one from another, so that they can be tuned to produce a desired sequence of notes when struck.

The chime bars coact with a clapper assembly which comprises an annular disk *h* secured at its outer rim to one end of a rod *i*. The other end of rod *i* is swingingly suspended by any suitable suspension means, shown as a wire loop *k*, on a radially extending arm *l* of a mounting sleeve *m*.

The mounting sleeve is fixedly secured to a support bar *n*, which in turn is fixedly secured to stand *c*. The bar *m* is extended through an opening in mounting plate *f* and an aperture *o* in clapper disk *h*. Accordingly, the entire clapper assembly will not participate in the rotation of the top body *a*, *b*.

As is evident, the point of suspension of part *i* is eccentric to the rotational axis of the top, and the clapper disk *h* is so positioned that it extends into the path of chime bars *g* when the same are rotated in unison with the top body.

As is readily apparent, and as previously mentioned, rotation of the top body and the bars produces a sequence of sounds, the tonal quality of which depends upon the lengths of the bars, which determine the specific note which will be produced when a given bar is struck.

Instead of mounting the sound-producing assembly *f*, *g* and *h* in the bottom part of the top, it is also within the scope and concept of the invention to mount the sound assembly on a partition wall separating the bottom part *a* from the upper part *b*.

The aperture *o* through which support bar *n* is extended preferably has a generally key-shaped configuration, as shown in FIG. 3. The wide part of the key-shaped opening permits swinging of disk *h* and its support rod *i* immediately after striking a chime bar, so that the clapper disk is not likely to be jammed by the next succeeding chime bar. The narrow part of the aperture provides guidance for the clapper disk and its support rod when a swinging motion is imparted to these components by centrifugal force.

While the invention has been described in detail with respect to a certain now preferred example and embodiment thereof, it will be understood by those skilled in the art, after understanding the invention, that various changes and modifications may be made without departing from the spirit and scope of the invention, and it is intended, therefore, to cover all such changes and modifications in the appended claims.

What is claimed is:

1. A musical top comprising a stationary stand, a hollow body rotatably supported on said stand for rotation about a vertical axis, and sound-producing means, said sound-producing means including several chime members mounted in mutually parallel relationship and a clapper member swingingly supported in a position extending into the path of the chime members, said chime members and said clapper member being rotatable in reference one to

another, whereby the impact of the clapper member against successive chime members produces a sequence of sounds.

2. A musical top according to claim 1, wherein said chime members have configurations different one from another to produce different sounds when struck by the clapper member.

3. A musical top according to claim 1, wherein said body comprises a dished bottom part and a transparent upper part.

4. A musical top comprising a stationary stand, a hollow body rotatably supported on said stand for rotation about a vertical axis, and sound-producing means, said sound-producing means including several chime bars supported by said body in mutually parallel relationship for rotation in unison with the body and a clapper assembly including a clapper swingingly supported in a position extending into the path of said bars, said clapper striking successive bars when the same are rotated, thereby producing a sequence of corresponding sounds.

5. A musical top according to claim 4, wherein said chime bars have lengths different one from another to produce different sounds.

6. A musical top according to claim 4, wherein said chime bars are positioned to define a cage of circular peripheral outline and coaxial with the rotational axis of said body, and wherein said clapper is swingingly supported within the outline of said cage eccentric to said rotational axis.

7. A musical top according to claim 6, wherein said body comprises a bottom part and an upper part, and wherein said chime bars are mounted at one end on a

mounting plate secured to said bottom part coaxially therewith.

8. A musical top according to claim 7, wherein said clapper comprises a rod and a disk secured at its outer rim to one end of said rod, and said clapper assembly includes a suspension means, the other end of said rod being swingingly suspended from said suspension means.

9. A musical top according to claim 8, wherein said suspension means is supported by said stand.

10. A musical top according to claim 9, wherein said suspension means comprises a mounting member disposed coaxially with said rotational axis and secured to said stationary stand, said mounting member having a lateral arm from which said clapper rod is suspended.

11. A musical top according to claim 10, wherein said disk has a generally key-shaped aperture, said mounting member extending through said disk aperture.

12. A musical top according to claim 10, wherein a mounting plate is secured to said stand and said mounting member is fixedly secured to said mounting plate.

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