Nov. 2, 1965 R. C. KESTER, JR 3,215,020

MUSICAL INSTRUMENT

Filed July 16, 1964 2 Sheets-Sheet 1

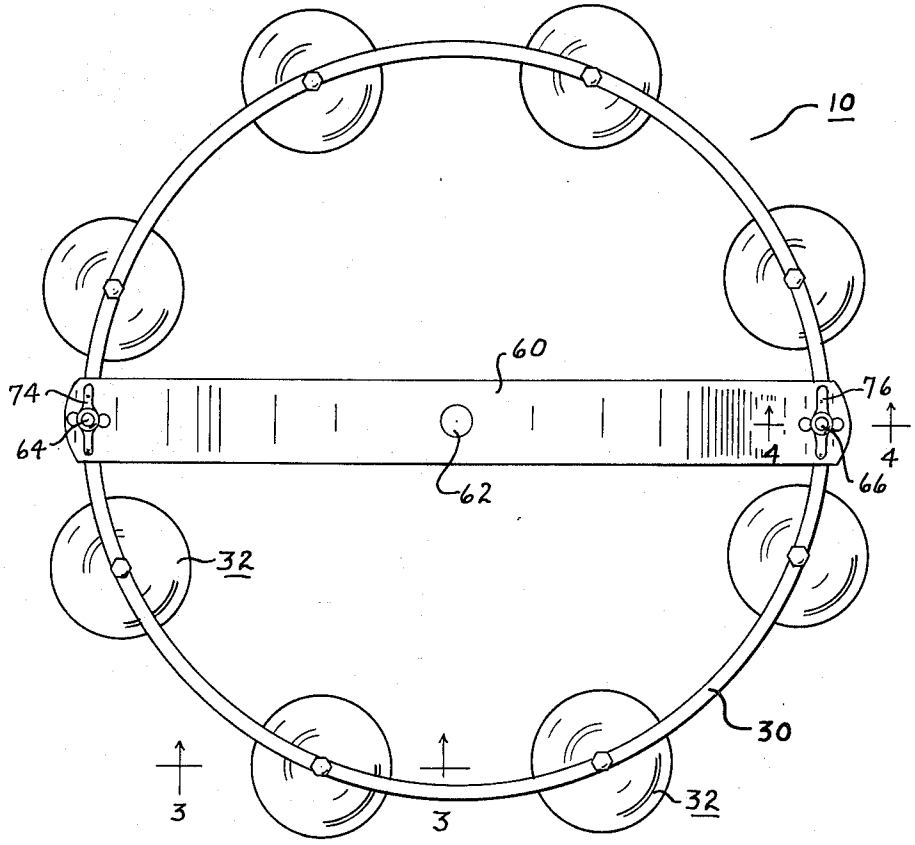


FIG. 1

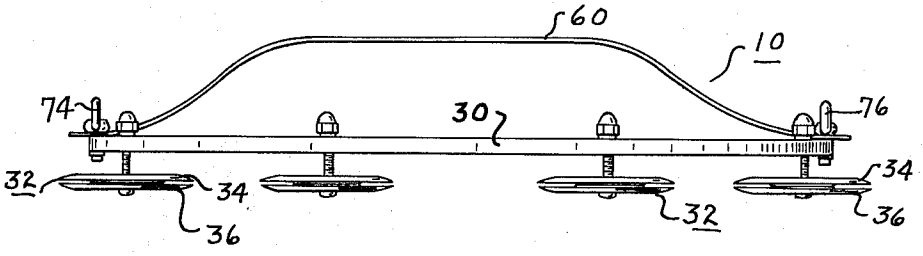


FIG. 2

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MUSICAL INSTRUMENT

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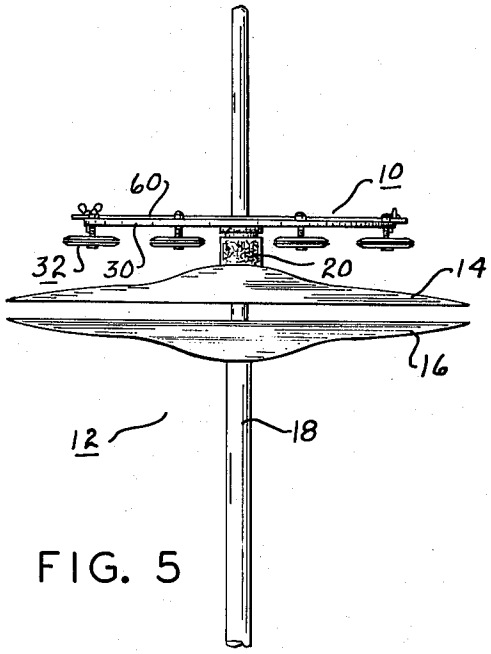


FIG. 5

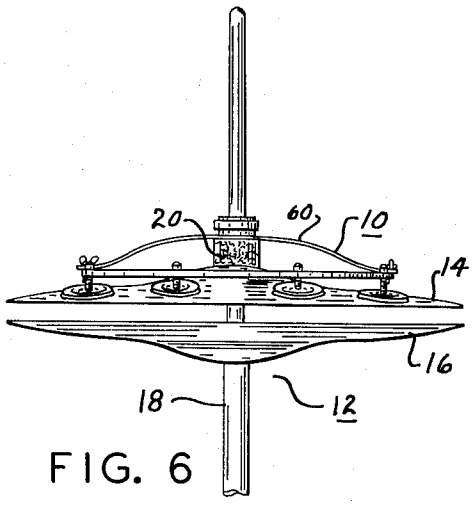


FIG. 6

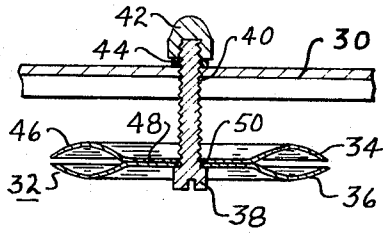


FIG. 3

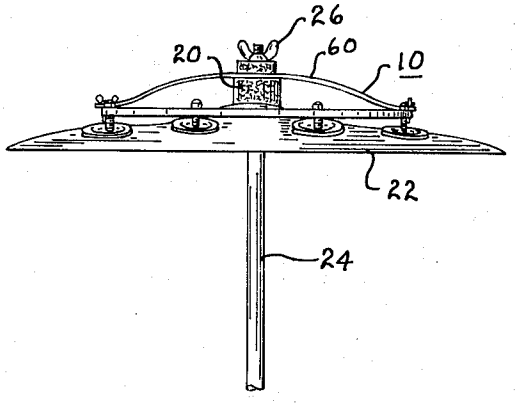


FIG. 7

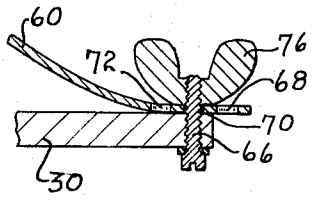


FIG. 4

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United States Patent Office 3,215,020 Patented Nov. 2, 1965

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MUSICAL INSTRUMENT

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Filed July 16, 1964, Ser. No. 383,048
7 Claims. (Cl. 84—411)

The present invention relates to a musical instrument, and more particularly to an instrument for use in conjunction with a conventional cymbal for producing sound effects or variations in tone when the cymbal is tapped or when the two discs of the hi-hat cymbal are engaged.

Various types of devices and improvisations have been made in the past to produce a variety of sounds and sound effects in combination with cymbals, including the use of coins loosely taped to the cymbal, the use of rivets loosely held in holes in the cymbal, and cymbal sizzlers, which vibrate on the cymbal when the cymbal is struck or otherwise operated by the player. These prior devices have been generally unsatisfactory and are limited to a particular sound, such as the sizzling effect created by the rivets. Various attempts have been made to vary, amplify and expand these sounds, but these prior efforts have generally been unsuccessful. It is therefore one of the principal objects of the invention to provide an instrument adapted to be attached to the cymbal holder, which can be adjusted to give a variety of different sounds and varied in position with respect to the cymbals to produce desired sound effects and which can easily be adjusted between the various positions on or near the cymbal without removing the device from the cymbal holder.

Another object of the present invention is to provide a device for producing a distinct and unusual sound effect on a cymbal, which can be adapted to either the single cymbal or to the hi-hat cymbal, and which can be used in direct contact with the cymbal or in spaced relation thereto to provide distinctly different sound effects during the striking or playing of the cymbal.

A further object of the invention is to provide a relatively simple, sturdy device for use in conjunction with either the hi-hat or single cymbal instrument, which will produce loud, distinct and unusual sound effects and which is so constructed and arranged that it can be easily mounted on and removed from the cymbal holder, stored, shipped and handled without any likelihood of damage.

Still another object is to provide a device of the aforesaid type which is so constructed that it will stand long, effective use and abuse without changing its tone characteristics and which can be easily constructed and adjusted to give an effective reproducible sound from one device to another.

Additional objects and advantages of the present invention will become apparent from the following description and accompanying drawings wherein:

FIGURE 1 is a top plan view of the present musical instrument;

FIGURE 2 is a side elevational view of the musical instrument shown in FIGURE 1;

FIGURE 3 is an enlarged fragmentary cross sectional view of a portion of the present instrument, the section being taken on line 3—3 of FIGURE 1;

FIGURE 4 is an enlarged fragmentary cross sectional view of the present instrument, the section being taken on line 4—4 of FIGURE 1;

FIGURE 5 is a side elevational view of a cymbal holder and the present instrument showing the instrument mounted thereon in one position;

FIGURE 6 is a side elevational view of a cymbal holder and the present instrument showing the instrument mounted thereon in another playing position; and

FIGURE 7 is a side elevational view of a cymbal and cymbal holder showing the present device mounted thereon in playing position.

Referring more specifically to the drawings and to FIGURE 1 in particular, numeral **10** designates the present musical instrument and, in FIGURES 5 and 6, numeral **12** designates a hi-hat cymbal clutch having cymbals **14** and **16** mounted on cymbal holder **18**, the present instrument **10** being mounted on the cymbal holder above the two cymbals on a cylindrical spacer **20**. The particular type of cymbal and cymbal holder is not important with respect to the present invention, and this is illustrated in FIGURE 7 where a single cymbal **22** mounted on cymbal holder **24** is shown in use with the present instrument **10**, the instrument being held on the cymbal holder by spacer **20** and wing nut **26** threaded on the upper end of the cymbal holder.

The present instrument consists of a ring or frame **30** preferably of an inverted U-shaped cross sectional configuration, as illustrated in FIGURE 3 with the external sides forming a generally rectangular cross sectional shape. Mounted on ring **30** are a plurality of sound disc units **32**, the embodiment in the drawings having eight of these sound disc units equally spaced around the ring **30**. The units **32** are identical in construction and size and consist of upper and lower discs **34** and **36**, respectively, held loosely on the lower end of screw **38** in spaced relation to the lower side of ring **30**. The screw extends upwardly through a hole **40** in the ring and is preferably threaded through said hole and is held firmly in place by a cap nut **42** threaded onto the upper end of the screw and seating firmly on a resilient washer **44**. The two discs **34** and **36** are identical in construction and size, and consist of a curved peripheral portion **46** supported by a center portion **48**, having hole **50** which fits loosely around the principal portion of screw **38**. The two center portions **48** are placed back to back and are mounted on the screws so that the portion **48** of the lower disc **36** rests on head **38** of the screws. When at rest, the peripheries of the two discs are spaced from one another. With the foregoing construction the two discs **34** and **36** are adapted to vibrate and jingle independently of one another and thereby to create the primary sound effect of the present instrument. The hole **50** in the two center portions of the discs **34** and **36** is sufficiently large to permit the two discs to assume positions at acute angles with respect to the axis of screw **38**, as illustrated in FIGURES 6 and 7.

The ring **30** is preferably formed of metal such as steel or aluminum, as are the two discs **34** and **36**; however, as a substitute for the ring, various other frame shapes are possible, such as intersecting straight bars which hold the sound disc units in various locations, to permit the sound disc units to perform in the same manner with respect to the cymbal as they do when mounted on the ring.

The ring **30** is mounted on the cymbal holder **18** by a flexible strap **60**, preferably of metal, having a center hole **62** for receiving the upper end of the cymbal. This strap is secured to ring **30** by screws **64** and **66** disposed at opposite ends of the strap and extending upwardly through holes in the ring and through one of several holes **68**, **70** and **72** in each end of the strap. After the strap has been assembled on the screws, wing nuts **74** and **76** are threaded onto the upper end of the screws to hold the strap firmly in position, either bowed or arched as shown in FIGURE 2 or straight as shown in FIGURE 5.

In operation, the present instrument may be mounted on the cymbal holder in any one of three positions illustrated in FIGURES 5, 6 and 7 resting on spacer **20**, and, in the position shown in FIGURE 5, the instrument is mounted on a hi-hat clutch with the sound disc units main-

tained in spaced relation to the upper cymbal, thereby depending on the vibration transmitted from the cymbal holder and radiating from the cymbal to produce vibration in the discs to create the desired sound effect. In FIGURE 6 the sound disc units rest directly on the upper cymbal **14** and vibrate therewith as the device is played either by striking or clashing the cymbals. In FIGURE 7, the instrument is mounted with the sound disc directly on the cymbal in a manner similar to that shown in FIGURE 6, and as the cymbal is struck by the player the discs vibrate, thus creating sound effects and modifying the sound effect of the cymbal.

While only one embodiment of the present invention has been described herein in detail, various changes and modifications can be made without departing from the scope of the invention.

I claim:

1. An instrument for use in conjunction with a cymbal having a cymbal holder, comprising a ring of U-shaped cross section, eight sound disc units mounted on said ring in equal spaced relation and extending downwardly from said ring in spaced relation to one another, each of said units having an upper and a lower disc with center holes, a screw extending through said holes and being secured to and held firmly in place on said ring, said holes being sufficiently large with respect to said screw to permit the discs to move freely on said screw, said discs having a curved peripheral portion and a center portion and being placed back to back with the center portions in contact with one another and the outer edges in spaced relation, and a strap extending across said ring and being adjustably secured thereto, said strap having a hole for mounting the instrument on a cymbal holder.

2. An instrument for use in conjunction with a cymbal having a cymbal holder, comprising a ring, a plurality of sound disc units mounted on said ring in equal spaced relation and extending downwardly from said ring in spaced relation to one another, each of said units having an upper and a lower disc with center holes, a screw extending through said holes and being secured to and held firmly in place on said ring, said holes being sufficiently large with respect to said screw to permit the discs to move freely on said screw, said discs having a curved peripheral portion and a center portion and being placed back to back with the center portions in contact with one another and the outer edges in spaced relation, and a strap extending across said ring and being adjustably secured thereto for mounting the instrument on a cymbal holder.

3. An instrument for use in conjunction with a cymbal having a cymbal holder, comprising a ring, a plurality of sound disc units mounted on said ring and extending downwardly from said ring in spaced relation to one another, each of said units having an upper and a lower disc with center holes, a pin-like support means extending through said holes and being secured to and held firmly in place on said ring, said holes being sufficiently large with respect to said means to permit the discs to move freely on said means, said discs having a curved peripheral portion and a center portion and being placed back to back with the center portions in contact with one another and the outer edges in spaced relation, and a means extending across said ring for mounting the instrument on a cymbal holder.

4. An instrument for use in conjunction with a cymbal having a cymbal holder, comprising a ring-shaped frame, a plurality of sound disc units mounted on said frame and extending downwardly from said frame in spaced relation to one another, each of said units having an upper and a lower disc with center holes, a pin-like support means extending through said holes and being secured to and held firmly in place on said frame, said holes being sufficiently large with respect to said means to permit the discs to move freely on said means, and a means extending across said frame for mounting the instrument on a cymbal holder.

5. An instrument for use in conjunction with a cymbal having a cymbal holder, comprising a ring, a plurality of sound disc units mounted on said ring and extending downwardly from said ring in spaced relation to one another, each of said units having an upper and a lower disc with center holes, a pin-like support means extending through said holes and being secured to and held firmly in place on said ring, and a means for mounting the instrument on a cymbal holder.

6. An instrument for use in conjunction with a cymbal having a cymbal holder, comprising a frame, a plurality of sound disc units mounted on said frame and extending downwardly from said frame in spaced relation to one another, each of said units having an upper and a lower disc with center holes, a pin-like support means extending through said holes and being secured to and held firmly in place on said frame, said discs having a curved peripheral portion and a center portion and being placed face to face with the center portions in contact with one another and the outer edges in spaced relation, and a means for mounting the instrument on a cymbal holder.

7. An instrument for use in conjunction with a cymbal having a cymbal holder, comprising a frame, a plurality of sound disc units mounted on said frame in spaced relation to one another, each of said units having an upper and a lower disc with center holes, a pin-like support means extending through said holes and being secured to and held firmly in place on said frame, and a means for mounting the instrument on a cymbal holder.

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