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Crigger

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[54] **ANGULARLY ADJUSTABLE CYMBAL MOUNTING**

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[51] **Int. Cl.** **G10d 13/00**

[58] **Field of Search** 84/402, 403, 421, 84/422, 327, 329

[56] **References Cited**

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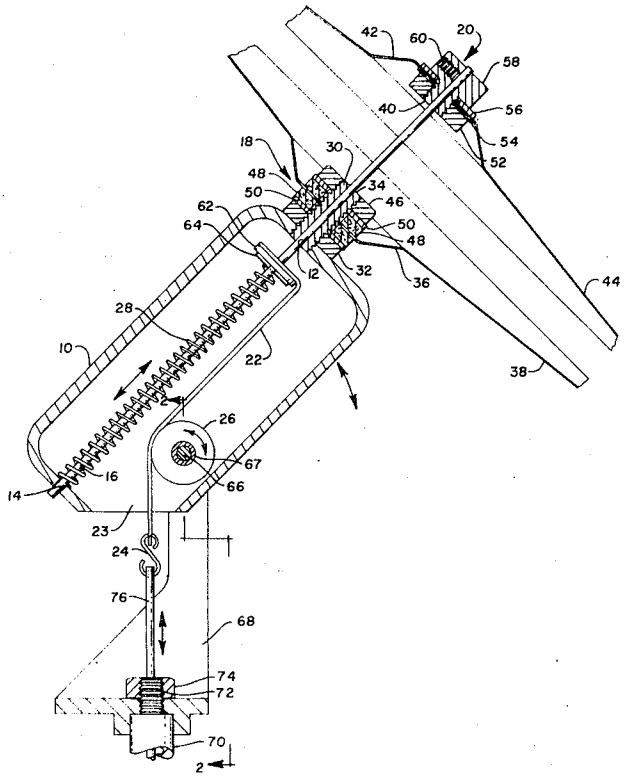
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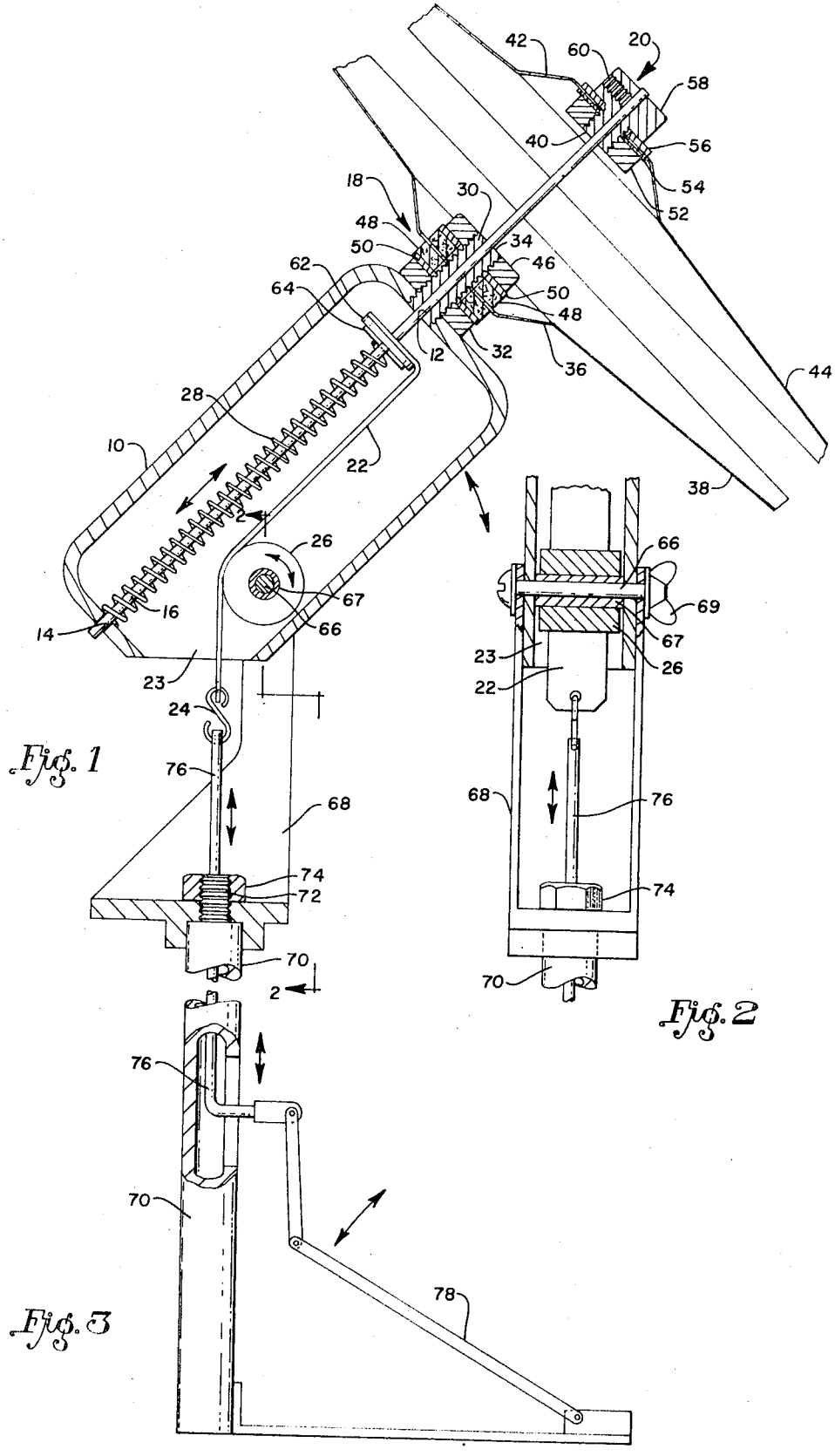
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[57] **ABSTRACT**

An angularly adjustable cymbal mounting head is provided for detachable connection to the upper portion of a treadle operated cymbal stand, the head comprising a body having forward bearing means and rearward bearing means adapted to slidably receive shaft means, means on said body for affixing a first cymbal to the forward portion thereof, said shaft means being adapted to extend through and beyond said first cymbal and being provided with means to affix a second cymbal thereto for movement therewith relative to said body and first cymbal, linkage means connected to said shaft means, mounting means angularly adjustably attached to said body for affixing said body to the upper portion of a treadle operated cymbal stand, and connecting means on said linkage means for attaching said linkage means to the treadle shaft of a cymbal stand.

6 Claims, 3 Drawing Figures




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Fig. 1
Fig. 2
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Fig. 3

ANGULARLY ADJUSTABLE CYMBAL MOUNTING

This invention concerns a novel mounting head for cymbals whereby a treadle operated cymbal stand supports the angularly adjustable mounting head such that by depression of the treadle the cymbals are brought into sound damping contact with each other.

Treadle operated cymbal stands are, of course, employed in the music field as exemplified by the commonly referred to high-hat or sock type of cymbals. In such devices, the cymbals are held in generally parallel planes to the floor and the drummer must reach upwardly, oftimes in an uncomfortable position, to play them. This often leads to striking of the cymbal edges, resulting in untrue sounds and damage to the sticks and cymbals.

An object of this invention, therefore, is to provide a cymbal mounting head which can be readily angularly adjusted to position the cymbals at any desired angle to the drummer to be comfortably played by him.

Another object is to provide such a mounting head with linkage means for attachment to the treadle shaft of a cymbal stand, which linkage provides an extremely smooth and positive motion of the cymbals relative to each other in response to depression or elevation of the treadle.

These and other objects hereinafter appearing have been attained in accordance with the present invention through the mounting head construction shown in the attached drawings comprising a body **10** having forward bearing means **12** and rearward bearing means **14** adpated to slidably receive shaft means **16**, means **18** on said body for affixing a first cymbal to the forward portion thereof, said shaft means being adapted to extend through and beyond said first cymbal and being provided with means **20** to affix a second cymbal thereto for movement therewith relative to said body and first cymbal, linkage means **22** connected to said shaft means, mounting means angularly adjustably attached to said body for affixing said body to the upper portion of a treadle operated cymbal stand, and connecting means **24** on said linkage means for attaching said linkage means to the treadle shaft of a cymbal stand.

In the drawings

FIG. **1** is a cross-sectional view of the mounting head with cymbals attached;

FIG. **2** is a view of FIG. **1** taken along line **2—2** thereof; and

FIG. **3** is a side view, partially broken away, of the lower portion of a conventional treadle stand.

Referring to the drawings, body **10** may be of any conveniently manufacturable shape and material which provides a forward bearing means **12** and rearward bearing means **14** to slidably receive shaft means **16**. The distance between these bearing means may, of course, be varied in accordance with rigidity of the shaft means, and in this regard the bearings may be integral with a single bushing on the body. In the embodiment shown, the forward bearing is conveniently provided by a threaded member **30** screwed into body **10** and locked thereto by nut **32**.

Shaft means **16** extending through bearing means **12** passes through a central aperture **34** in depression **36** in cymbal **38** and through central aperture **40** in depression **42** in cymbal **44**. Cymbal **38** is locked to member **30** by nut **46** and is cushioned by felt washers **48** and rigid washers **50**. Other such convenient cushioning and securing means may, of course, be employed. Cymbal **44** is conveniently attached in the embodiment shown to shaft means **16** by nut **52**, felt washer **54**, rigid washer **56**, and collar **58** provided with set screw **60**.

Attached to shaft means **16** is linkage means **22** passing through the rear opening **23** in body **10** and comprising, in the preferred embodiment, a strap of flexible but relatively nonextensible material such as leather, steel, polypropylene, Nylon, or the like. Its attachment to the shaft means may be by any means such as passing the shaft means through the strap, backing it up by washer **62** and securing in place by pin **64**. Other mechanical attaching means, or welding or glueing may be employed. It will be recognized by those skilled in the art that in place of strapping, wire cable, cord, small chain or the like may be employed. Strapping, however, allows an extremely smooth and noiseless motion, as well as resisting excessive rotation of cymbal **44**. In this regard, it will be recognized that conventional keying construction may be provided on shaft means **16** and body **10** in order to prevent rotation of cymbal **44**.

Linkage means **22**, in the preferred embodiment, passes over directional bearing means **26** which may be a simple shoulder or a more complex roller mounted on a shaft **66**. Spacer bushing **67** is preferably employed to allow tightening of wing nut **69** on shaft **66** after the desired angular adjustment of body **10** is made. Roller **26** can also be replaced by a sprocket for use with a small chain employed as the linkage means. In the preferred embodiment, bearing **26** is positioned such that the pulling force generated by depression of the treadle **78** will always be translated into a pulling force substantially parallel to shaft means **16** in order to give the smoothest action possible of the shaft through its bearings. As shown in the drawings, this is accomplished by mounting bearing **26** at the pivot point of body **10** about a support **68** which is conveniently connected to the upper end **70** of the cymbal stand by a threaded bushing **72** and nut **74**. The treadle shaft **76**, slidable in bushing **72**, is conveniently detatchably connected to linkage **22** by the S hook connecting means **24**, or other convenient means. It can be seen that, in whatever position the drummer inclines the cymbals toward him, depression force on the treadle **78** will be translated substantially axially of shaft means **16**. As the depression force is removed from the treadle, spring means **28** provides a force to urge cymbal **44** away from cymbal **38**. This spring means is conveniently positioned as shown around shaft **16**, however, other compression or extension spring arrangements well-known to the art may be employed. The spring force may be adjustable by known means such as providing an adjustable set-screw type collar on shaft means **16** against which the forward end of the spring abuts.

This invention has been described in detail with particular reference to certain preferred embodiments thereof, but it will be understood that variations and modifications may be made within the spirit and scope of the invention as described hereinabove.

I claim:

1. A mounting head for cymbals comprising a body having forward bearing means and rearward bearing means adapted to slidably receive shaft means, means on said body for affixing a first cymbal to the forward portion thereof, said shaft means being adapted to extend through and beyond said first cymbal and being

provided with means to affix a second cymbal thereto for movement therewith relative to said body and first cymbal, linkage means connected to said shaft means, mounting means angularly adjustably attached to said body for affixing said body to the upper portion of a treadle operated cymbal stand, and connecting means on said linkage means for attaching said linkage means to the treadle shaft of a cymbal stand.

2. The mounting head of claim 1 wherein said linkage is comprised of flexible material.

3. The mounting head of claim 1 wherein directional bearing means are provided on said body to contact said linkage means to direct its travel.

4. The mounting head of claim 1 wherein spring means are provided contacting said body and said shaft means for urging said cymbals apart.

5. The mounting head of claim 3 wherein the directional bearing means are positioned substantially on the pivot axis of the mounting head relative to the cymbal stand.

6. The mounting head of claim 1 pivotally attached to a treadle actuated cymbal stand, and having a pair of cymbals attached thereto.

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