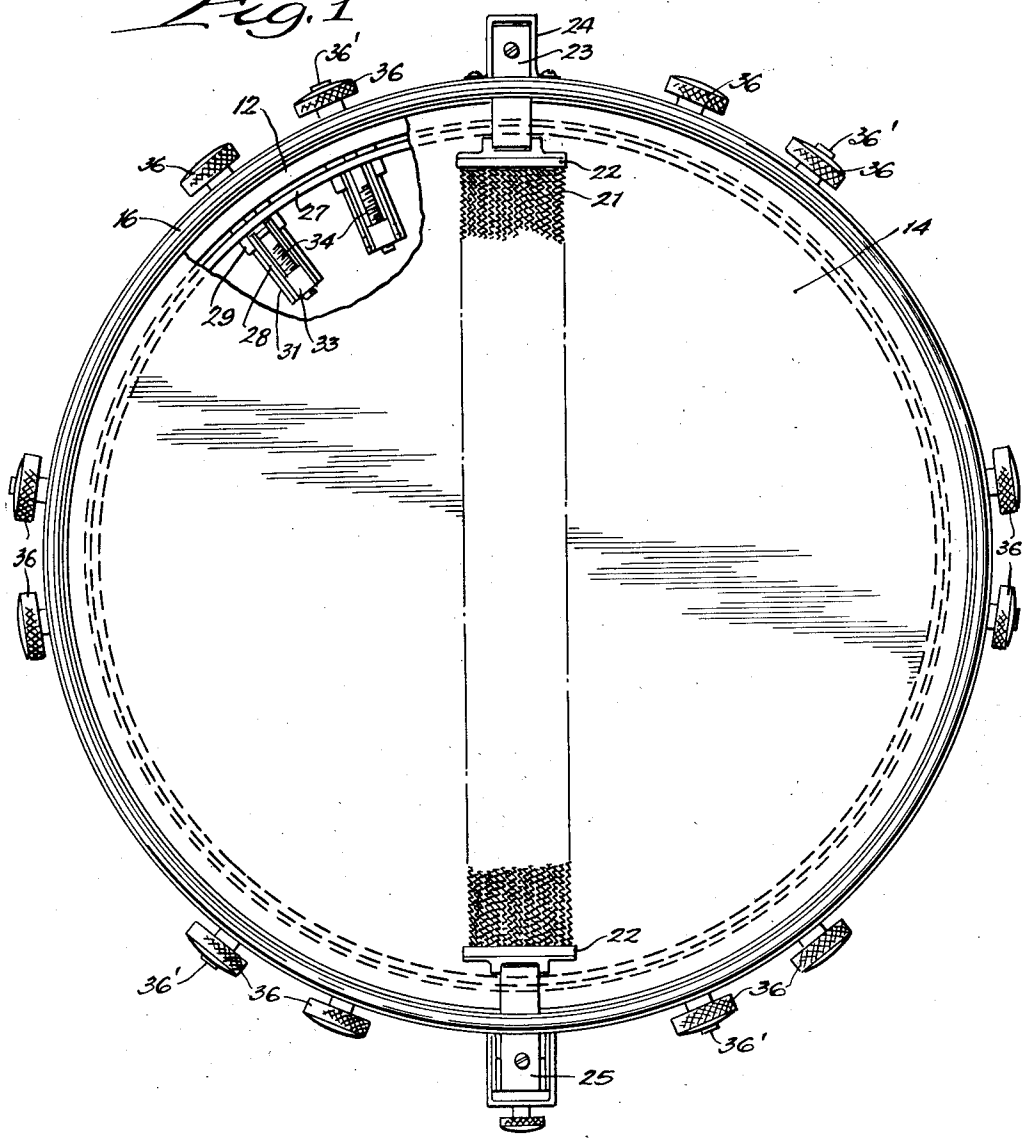
Sept. 9, 1952 G. H. WAY 2,609,722

DRUM

Filed April 28, 1950 2 SHEETS—SHEET 1

Fig. 1



INVENTOR:
George H. Way,
BY
Dawson, Owens, Booth and Spangenberg,
ATTORNEYS.

Sept. 9, 1952 G. H. WAY 2,609,722

DRUM

Filed April 28, 1950 2 SHEETS—SHEET 2

Fig. 2

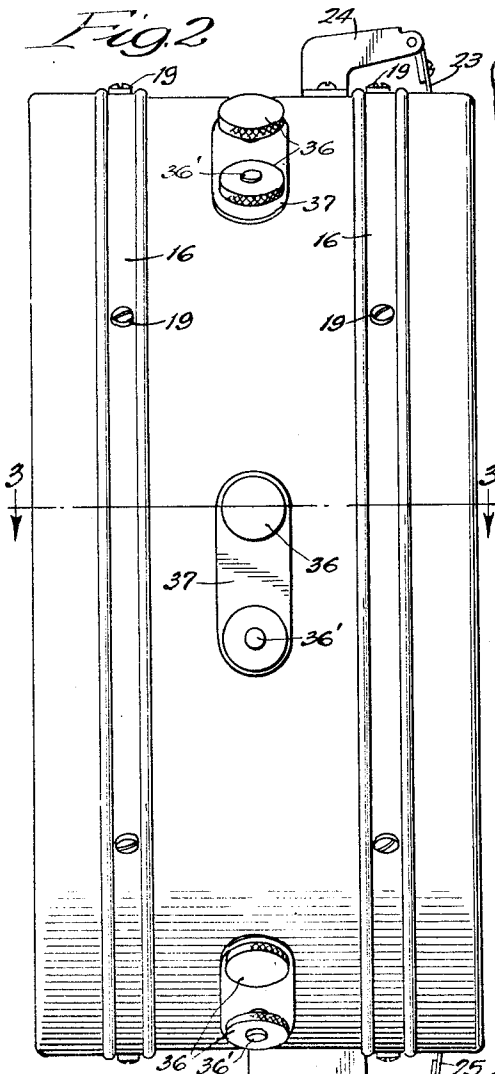


Fig. 4

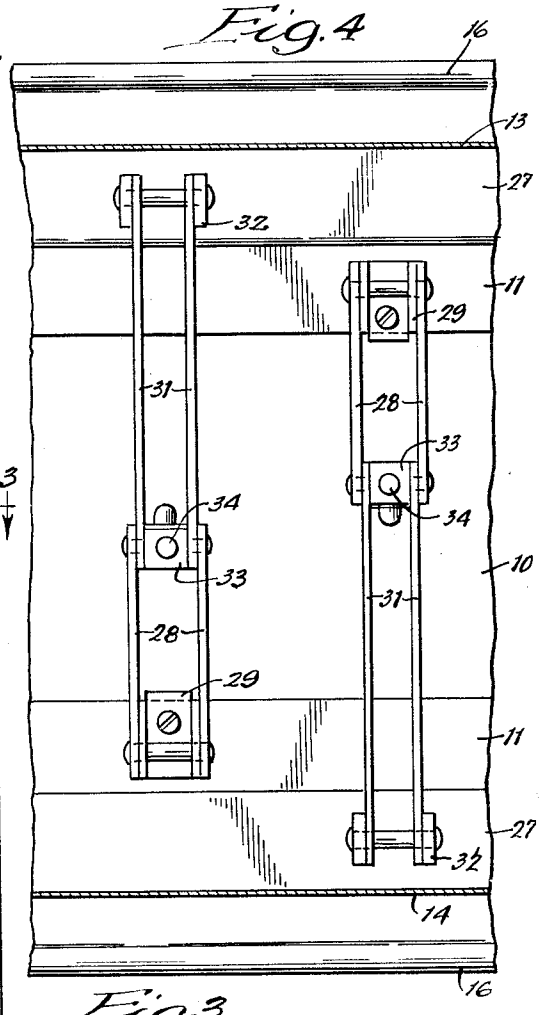
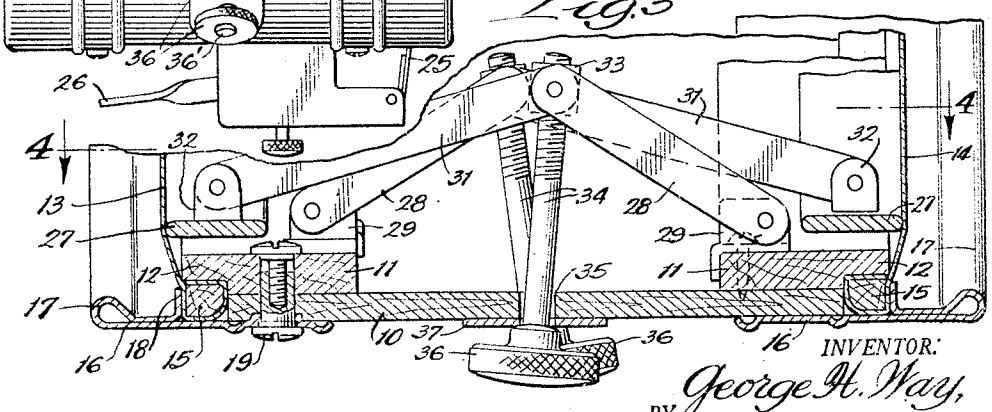


Fig. 3



INVENTOR.
George H. Way,
BY
Dawson, Orne, Booth and Spangenberg,
ATTORNEYS.

Patented Sept. 9, 1952 2,609,722

UNITED STATES PATENT OFFICE

2,609,722

DRUM

George H. Way, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a corporation of Indiana

Application April 28, 1950, Serial No. 158,799

6 Claims. (Cl. 84—411)

1

This invention relates to drums, and more particularly to the mounting and adjustment of drum heads on the drum bodies.

Drums have heretofore been manufactured by attaching a flesh hoop to the drum head to fit slidably over the end of the drum body. Counterhoops are then fitted over the flesh hoops and drawn down to tighten the head to the desired extent. This type of construction clutters the exterior of the drum with a number of adjustable fastenings for the counterhoops thereby seriously limiting design possibilities.

It is one of the objects of the present invention to provide a drum in which the head tensioning mechanism is contained in the interior of the drum body and the only parts on the exterior of the drum are operating knobs to adjust the tensioning mechanism. According to one feature of the invention the head is tensioned by a ring movably mounted inside of the body and engageable with the inner surface of the head.

Another object is to provide a drum in which the ring to engage and tension the head is movably supported by a series of toggle linkages which are individually adjustable through threaded rods extending to the exterior of the drum body.

Still another object is to provide a two-headed drum in which the heads are individually adjustable by a mechanism inside of the drum body.

The above and other objects of the invention will be more readily apparent when read in connection with the accompanying drawings, in which—

Figure 1 is an end view of a drum embodying the invention with parts broken away;

Figure 2 is a side elevation;

Figure 3 is a partial section on the line 3—3 of Figure 2; and

Figure 4 is a partial section on the line 4—4 of Figure 3.

The drum as shown comprises the usual tubular body 10 which in a two-headed drum as illustrated is open at both ends. The body may be formed of wood, metal, plastic, or any other desired material, and may be decorated on its exterior to carry out any desired type of design. On the interior of the body adjacent its ends a pair of reinforcing rings 11 are mounted which may be formed of the same material as the body and which are rigidly secured on the interior thereof. Each of the reinforcing rings 11 is provided with an end flange 12 projecting beyond

2

the end of the body to define therewith an annular peripheral groove.

The ends of the body are covered by vibrato heads 13 and 14, one of which may be a beater head and the other of which may be a relatively lighter snare head. The heads may be formed of calf skin or any other desired flexible material, as is customary in drum construction. Each of the heads is secured at its periphery to an annular flesh hoop 15 which may be a wooden or metal ring about which the peripheral portion of the head is wrapped and secured in the usual manner. The flesh hoops are of a size to be received over the flanges 12 in the annular peripheral grooves formed thereby and are rigidly held in place by counter-rings 16 fixedly secured to the drum body. As shown, each counter-ring includes a rolled outer edge portion 17 terminating at one side in an angular flange 18 overlying the flesh hoop to hold it securely in the groove. The other leg of the rolled counter-ring extends along the drum body and may be secured thereto by fastening screws 19. In this way the heads are fixedly secured to the end portions of the body and they are preferably of such a size that when so mounted they will be relatively loose.

A snare unit may engage the snare head of the drum and as shown comprises a series of snares 21 secured at their opposite ends to holders 22 and stretched across the snare head of the drum. One of the holders 22 may be connected through a flexible strap 23 to a fixed bracket 24 at one side of the drum body, and the other may be connected through a similar strap 25 to an adjustable supporting unit controlled by a lever 26. By manipulating the lever the snare unit may be drawn against the head or released therefrom as desired.

In order to tension the heads to a proper playing tension a pair of annular rings 27 are provided on the interior of the drum body, each of which is adapted to engage the inner surface of one of the heads. The rings 27 are slightly smaller in diameter than the reinforcing rings 11 to be movable axially therein so that when they are shifted outward, as seen in Figure 3, the heads will be drawn tight within their corresponding rings.

Each of the rings is individually controllable to vary the tension of its corresponding head independently of the other head. For this purpose a series of sets of toggle links are provided for each of the rings. Each set of toggle links comprises a link 28 pivoted at one end to a

bracket 29 mounted on one of the reinforcing rings 11. A second link 31 is pivoted at one end on a bracket 32 carried by the ring 27 at the opposite end of the drum. The links 28 and 31 are pivotally interconnected through a pivot block 33 which is transversely threaded to receive a threaded rod or screw 34. The rod or screw 34 extends through an opening 35 in the side of the drum body and terminates in a knurled knob 36 lying on the outside of the body. The knob is provided with a tapered shoulder to engage a reinforcing plate 37 on the drum body so that tension on the screw will be properly resisted. Preferably the knobs for adjusting the different heads are slightly different in design for easy identification. As shown, the knobs 36 for tensioning the batter head are formed with central projecting tips 36' for this purpose.

As will be best seen from Figure 3, when the screw is turned in a direction to move the pivot block toward the outside of the body, the toggle links tend to straighten out thereby to move the corresponding ring 27 toward the head to tension it. It will be noted that the several toggle links connected to each of the rings constitute the sole support for the ring so that it can shift axially in the body and will be properly centered by engagement with the head.

In the construction shown there are six sets of toggle links for each of the rings 27, although this number may vary for drums of different sizes or types, and each set of toggle links acts between one of the rings and the reinforcing ring 11 at the opposite end of the drum. Thus, with this construction the rings are separately adjustable so that the individual heads can be separately tensioned to the desired extent. Furthermore, the mechanism is extremely compact and is all-contained in the interior of the drum body so that the only parts on the exterior of the body are the knobs 36. This enables a variety of pleasing designs to be used on the drum. Additionally, the present design eliminates the need for a key to adjust the head tension and which is apt to become lost.

While one embodiment of the invention has been shown and described in detail herein, it will be understood that this is illustrative only and is not to be taken as a definition of the scope of the invention, reference being had for this purpose to the appended claims.

What is claimed is:

1. A drum comprising a hollow body open at at least one end, a vibratile head extending across the open end of the body, means rigidly securing the head to the body around the open end, an annular ring in the body adjacent the open end to engage the interior surface of the head, pivotally interconnected toggle links one of which is pivoted to the drum body and the other of which is pivoted to the ring, and adjustable tension means extending through the body and connected to the central portion of the toggle links.

2. A drum comprising a hollow body open at at least one end, a vibratile head extending across the open end of the body, means rigidly securing the head to the body around the open end, an annular ring in the body adjacent the open end to engage the interior surface of the head, a plurality of sets of toggle links in the body connecting the ring to the body, each set including one link pivoted to the body, another link pivoted to the ring, a pivot block connecting the links, and a threaded rod extending through the body and threaded into the pivot block.

3. A drum comprising a hollow body open at at least one end, a vibratile head extending across the open end of the body, a flesh hoop secured to the head, the body being formed at its open end with an annular recess in which the flesh hoop is receiving, a counter hoop rigidly secured to the open end of the body and engaging the flesh hoop to hold it in the recess, an annular ring in the body engageable with the inner surface of the head, adjustable means in the body supporting the ring for movement toward and away from the head, and an operating member for the adjustable means extending through the body.

4. A drum comprising a hollow body open at at least one end, a vibratile head extending across the open end of the body, a flesh hoop secured to the head, the body being formed at its open end with an annular recess in which the flesh hoop is receiving, a counter hoop rigidly secured to the open end of the body and engaging the flesh hoop to hold it in the recess, an annular ring in the body engageable with the inner surface of the head, a plurality of sets of toggle links each connected at one end to the body and at its other end to the ring, and a threaded operating member for each set of links threaded to the central portion of the links and extending through the body for operation from the outside thereof.

5. A drum comprising a tubular body open at both ends, a head extending across each end of the body, means rigidly securing the peripheral portion of each head to the body, a pair of annular rings in the body engageable with the inner surfaces of the heads respectively, a separate adjustable means in the body independently supporting the rings for individual adjustment toward and away from the respective heads, and an operating member for each of the adjustable means extending through the body.

6. A drum comprising a tubular body open at both ends, a head extending across each end of the body, means rigidly securing the peripheral portion of each head to the body, a pair of annular rings in the body engageable with the inner surfaces of the heads respectively, a plurality of sets of toggle links for each of the rings, each set of links being pivoted at one end to the body and at its other end to the ring, and a threaded rod threaded to the central portion of each set of links and extending through the body.

GEORGE H. WAY.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,214,171	King	Jan. 30, 1917
2,070,082	Horak	Feb. 9, 1937
2,074,193	Strupe	Mar. 16, 1937
2,495,896	Jeffries	Jan. 31, 1950

FOREIGN PATENTS

Number	Country	Date
342,951	Germany	Oct. 25, 1921