July 7, 1964 P. O. GRANT ETAL 3,139,783

DRUM KEY HOLDER

Original Filed Dec. 16, 1960

Fig. 1.

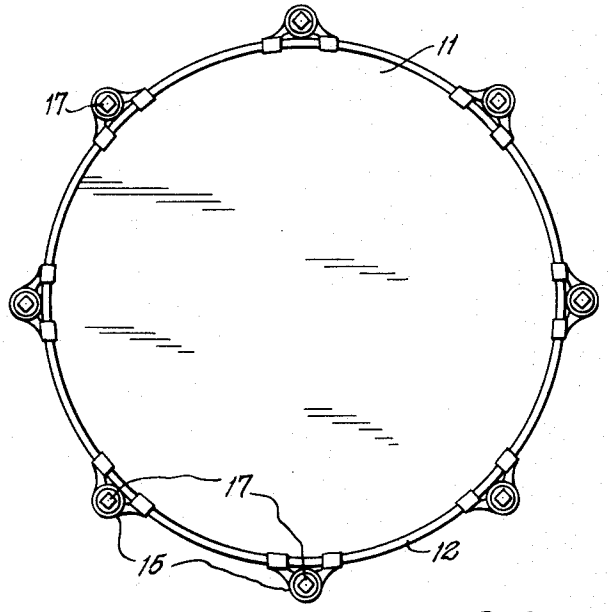


Fig. 3.

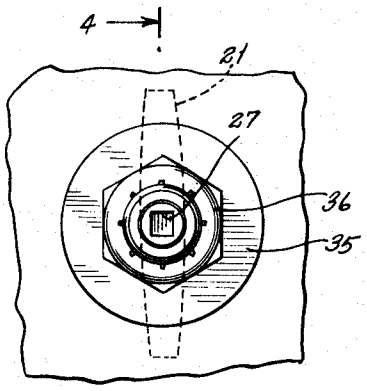


Fig. 2.

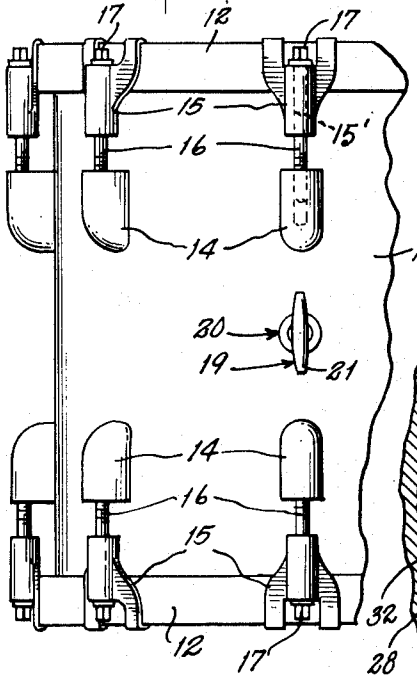


Fig. 4.

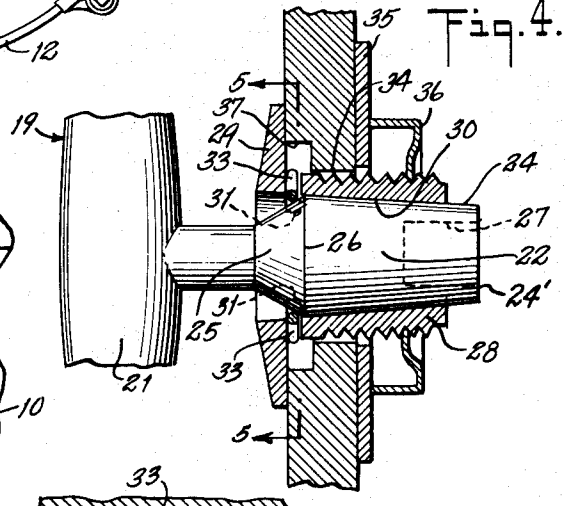
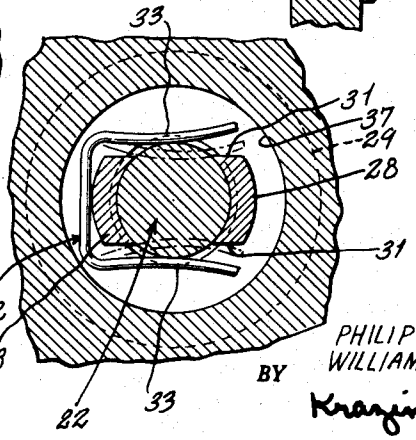


Fig. 5.



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DRUM KEY HOLDER

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Continuation of application Ser. No. 76,331, Dec. 16, 1960. This application May 16, 1963, Ser. No. 282,530
1 Claim. (Cl. 84—411)

The present invention relates to musical instruments and, more particularly, to a drum provided with a holder for a key which is used for tightening and relaxing the skin of the drum.

This application is a continuation of our application Serial No. 76,331, filed December 16, 1960, now abandoned.

A conventional type of arrangement for tightening or relaxing the skin of a drum comprises a plurality of internally threaded lugs circumferentially spaced on the side wall of the drum, clamps having a bore in the body thereof and bolts extending through the bores and threaded into the lugs which have a head adapted to be engaged by a key for rotating the bolts.

Heretofore, it has been customary for the drummer to carry the key in his pocket or in the case for the drum. This often caused delay in finding the key when it was needed which delay of course was annoying. Also it has been customary to mount the key on a clip provided on the exterior of the drum. The key in this instance often caused annoying vibrations and, further, often became disengaged from the clip and became lost.

Accordingly, an object of the present invention is to overcome the foregoing difficulties and annoyances by providing a key holder adapted to be positively secured to the drum, so that the key at all times when not in use was locked onto the drum.

Another object of the invention is to provide such an arrangement which lends itself to conventional drum and key structure, whereby the holder can be readily applied to newly manufactured drums and drums already in use.

Another object of the invention is to provide such an arrangement which avoids vibration and thereby does not affect the quality of the tones of the drum.

A further object of the invention is to accomplish the foregoing in a simple, practical and economical manner.

Other and further objects will be obvious upon an understanding of the illustrative embodiment about to be described, or will be indicated in the appended claims, and various advantages not referred to herein will occur to one skilled in the art upon employment of the invention in practice.

A preferred embodiment of the invention has been chosen for purposes of illustration and description and is shown in the accompanying drawing, forming a part of the specification, wherein:

FIG. 1 is a plan view of a drum.

FIG. 2 is a fragmentary side elevational view of the drum illustrating the key and key holder thereon.

FIG. 3 is an enlarged fragmentary elevational view of the key and key holder as seen from the interior of the drum.

FIG. 4 is an enlarged sectional view taken along the line 4—4 on FIG. 3 illustrating the key and key holder in detail.

FIG. 5 is a sectional view taken along the line 5—5 on FIG. 4.

Referring now to the drawing in detail, a conventional drum is shown in FIGS. 1 and 2 which comprises a hollow cylindrical body or side wall **10**, a skin **11** mounted across the top and bottom of the body by rims **12**, a plurality of circumferentially spaced internally threaded lugs **14** on the body adjacent the top and bottom thereof, clamps **15** for engaging the rims having a bore **15'** in the body thereof, and bolts **16** extending through the bores and threaded into the lugs **14** having heads **17** adapted to be engaged by a key for rotating the bolts **16** to tighten or relax the skin **11**.

In FIG. 2, a key **19** and a key holder **20** are shown positioned on the side wall **10** between an upper and a lower lug **14** which are in vertical alignment, so that the key does not protrude beyond any structure of the drum.

The key **19** and the key holder **20** are illustrated in detail in FIGS. 3 to 5, wherein a key **19** is shown comprising a handle **21**; and a shank **22** having a pair of oppositely tapered shank portions **24** and **25**, the portion **24** being at the forward or inner end **24'** and the portion **25** being rearwardly thereof to provide a zone **26** of maximum peripheral dimension at the junction of these zones, and having a socket **27** at the forward end **24'** for receiving the head **17** of a bolt **16**.

The key holder **20** comprises a plug-shaped portion **28**, a flange portion **29** at the outer end of the plug-shaped portion, the portions **28** and **29** having a bore **30** tapering inwardly from the portion **29** to the portion **28** to provide a socket in the plug-shaped portion for receiving the inner shank portion **24** of the key **19** in close fitting relation, and opposite peripheral slots **31** adjacent the flange portion, and a U-shaped spring **32** positioned about the plug-shaped portion and having leg portions **33** extending through the slots **31** for locking the key in the holder.

In order to mount and secure the key holder **20** onto the drum, the side wall **10** of the drum is formed with an opening **34** through which the exteriorly threaded plug-shaped portion **28** extends. A plate or washer **35** in abutting engagement with the inner side of the wall and an internally threaded nut member **36** against the inner surface of the plate readily secure the plug-portion **28** to the drum. The opening **34** is provided with an enlarged portion or counterbore **37** at the outer end for clearing the spring **32** and for permitting expansion of the leg portions **33**, and the flange portion **29** engages the outer side of the wall **10** to firmly retain the holder therein.

In operation, the key **19** is inserted into the bore **30**, thereby causing its tapered portion **24** to expand the spring **32** and allowing the spring to contract when the zone **26** has passed through it to thus firmly engage the tapered portion **25** and retain the portion **24** within the inner end of the bore **30**. When the key is withdrawn, the portion **25** expands the spring **32** and allows the zone to pass through it, thereby releasing the key.

From the foregoing description, it will be seen that the present invention provides a simple, practical and economical arrangement for releasably locking a key onto a drum, which arrangement is rugged in construction and can withstand such rough usage to which it may normally be subjected.

As various changes may be made in the form, construction, and arrangement of the parts herein, without departing from the spirit and scope of the invention and without sacrificing any of its advantages, it is to be understood that all matters are to be interpreted as illustrative and not in any limiting sense.

What is claimed is:

A drum key holder comprising a plug shaped element having an exteriorly threaded portion for mounting in a side wall opening of a drum, a flange at the outer end of the element for engaging an outer surface of said side wall, said element having a through bore tapering inwardly from said flange for snugly receiving a drum key having a complementary tapered surface, said element having opposite peripheral slots adjacent to and inwardly of said flange, a U-shaped spring having leg portions freely disposed in said slots for resiliently urging said key into said tapered bore to thereby prevent vibration of the key in the element during playing of the drum, and nut means carried by the element at the inner surface of the wall for securing the key holder to the drum.

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