Oct. 9, 1962 K. H. WEIMER 3,057,591

COLLAPSIBLE MULTI-PURPOSE STAND

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Fig. 1.

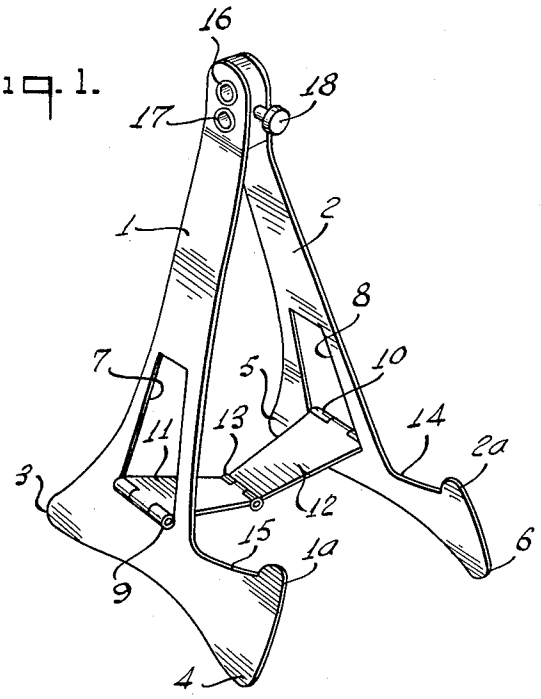
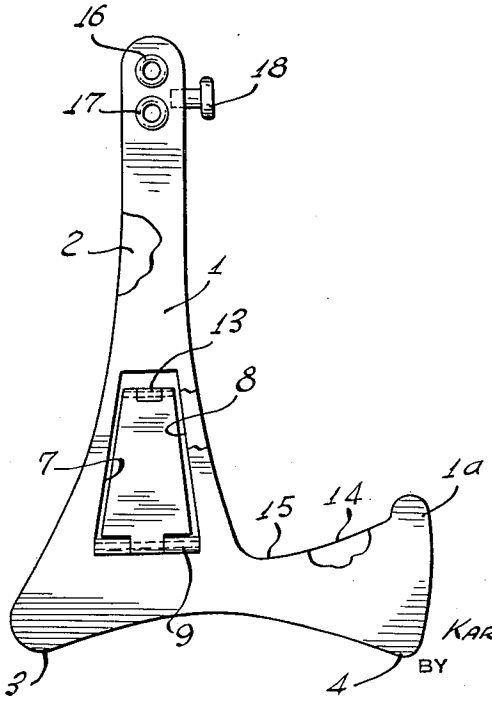


Fig. 2.



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Fig. 3.

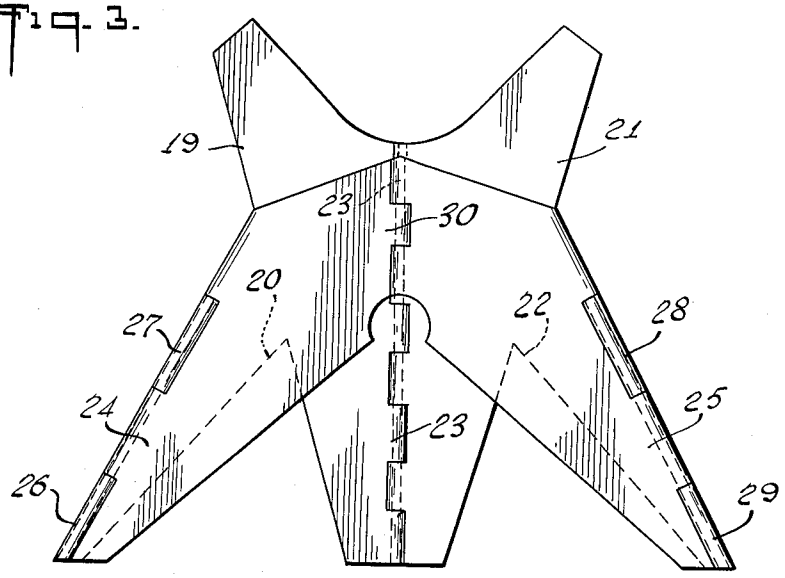


Fig. 4.

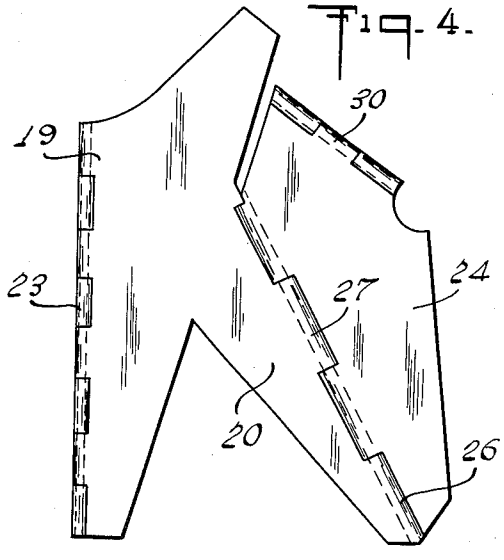
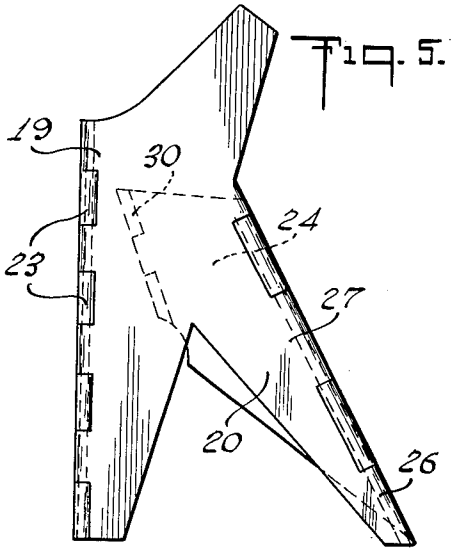


Fig. 5.



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COLLAPSIBLE MULTI-PURPOSE STAND

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The invention relates to a multiple purpose stand, and more particularly to a stand for resting a musical instrument or the like while it is not in use.

Different types of stands for supporting musical instruments are already known. These stands mainly serve for supporting the instruments in upright position during intermissions or exchange of instruments. Another use for such stands is for display of musical instruments in a store, at an exposition, and the like.

One of such stands is known, for instance, for guitars, which comprises a collapsible leg rest directly attached to the guitar; while the guitar is being played, the piece forming the rest is folded back; when the player intends putting the instrument down, the piece is pulled out whereupon it forms a rest supporting the instrument in upright position.

The above mentioned supporting means has the disadvantage that it can only be used in instruments having no resonance and whose body consists of solid wood.

Another support or stand is known for resting a string instrument known as double bass. This stand consists mainly of a tube having at the bottom end extensible and retractable legs. The tube carries another, axially adjustable tube, which is provided with a yoke member, likewise capable of adjustment, and which can be adapted to the width of the instrument so as to hold it safely.

This stand has the shortcoming that it takes up a large amount of space, particularly in transportation; another drawback is that the setting up and the knocking down of the stand requires considerable manipulation.

It is the object of the present invention to overcome the drawbacks of the existing music stands and to provide a multiple purpose stand which is easy to manufacture and to handle.

It is another object of the invention to provide a stand which comprises few parts which are so interconnected that the stand can be set up or knocked down, respectively, in a single movement.

It is a further object of the invention to provide a stand which affords a safe support for resting an upright object, particularly a musical instrument, while not in use.

It is yet another object of the invention to provide a stand for a musical instrument that is adaptable to the contours of the instrument which it supports.

Other objects and advantages will become apparent from the following description.

With the above objects in view, the invention provides a multiple purpose stand which is principally composed of a plurality of standards which are interconnected by hinges or secured to each other at one point. A number of connecting or bridging members is further provided, likewise hinged to each other and to the standards, said bridging members being capable of being spread apart and thereby to space the standards, which then form a stable stand for supporting objects thereon. When the bridging members are folded together, they take along the standards which then will lie closely together in a flat position, in which they can be easily stored or shipped. The setting up or knocking down of the stand can be accomplished by a single movement.

In one preferred embodiment, the stand according to the invention consists mainly of three parts; two parts which form the standards, and are secured to one another at their top ends, and have their bottom ends enlarged to form secure pedestal-like legs with a plurality, preferably four points of support.

Between the two standards, a knock-down mechanism is arranged which is hingedly connected to the standards. The mechanism comprises a bridge member which is divided at the center, the two parts so formed being likewise linked to one another. Due to the hinge connection of the free ends of the bridge portions to the legs, the latter are extended to form a V in the position of use and are, at the same time, locked in that position.

In another preferred embodiment, the stand comprises two standards interconnected by hinges, with leg portions integrally formed on each of the standards. Two more legs are provided, which are connected to one another and to one leg portion each of the standards. Due to these hinge connections an articulated chain is formed which makes setting up of the stand and knocking down quite simple. When the stand is in operating position, or position of use, it forms a triangular structure with three points of support.

While the stand can be made of a number of materials, it is preferably made of plastic, since the plastics are light in weight while being stress- and wear-resistant.

In the following, the invention will be more fully described with reference to the accompanying drawings, but it should be understood that these are given by way of illustration and not of limitation and that many changes in the details can be made without departing from the spirit of the invention.

In the drawings:

FIG. 1 is a perspective showing of one embodiment of a stand according to the invention in position of use;

FIG. 2 is the same embodiment shown in side view and in collapsed condition;

FIG. 3 illustrates a different embodiment of a stand according to the invention in front view, in position of use;

FIG. 4 is a side view of this stand in collapsed condition; and

FIG. 5 is a side view of the same stand in position of use.

Referring now to FIGS. 1 and 2, the stand is shown to comprise two substantially vertical standards **1** and **2**, between which a mechanism is disposed for setting up or collapsing the stand, respectively. The mechanism comprises two bridge members **11** and **12**, which are linked by hinges **13**. At the bottom ends, standards **1** and **2** are bent into substantially horizontally extending leg portions **1***a* and **2***a*, which are of curved shape in their center portions and have circular shaped ends **3**, **4** and **5**, **6**, respectively forming supporting points for the stand.

Each standard **1** and **2** has an opening therein, opening **7** in standard **1** and opening **8** in standard **2**, with bearings **9** and **10** arranged therein. The bridge member **11** is journalled in bearing **9** and bridge member **12** in bearing **10**. In the center, a hinge **13** connects the two pieces.

The horizontal leg portions **1***a* and **2***a* of the standards **1** and **2** have recesses **14** and **15** formed therein which are shaped to conform, as closely as possible, to the contour of a musical instrument which is to be received for vertical support by the stand. In the example shown, the recesses are shaped to accommodate a guitar.

At the upper ends of the standards **1** and **2**, eyes **16**, **17** are provided which serve for connection of the standards and may also be used for receiving hooks or similar elements for hanging up the stand if not in use.

A buffering member **18** of resilient material is provided at the front of the stand near the eyes **16** and **17**.

The stand operates as follows:

When out of use, the standards **1** and **2** of the stand are close together, the two bridge portions **11** and **12** are vertically above their bearings in the openings **7** and **8** (FIG. 2).

When it is intended to set up the stand into operating position, the two standards are spread apart at their lower ends by a single movement, whereby the two bridge portions **11** and **12** hinged at **13** open automatically and place themselves at an obtuse angle between the standards **1** and **2** locking themselves in spread position.

In this position, the stand rests on the four points **3**, **4**, **5**, **6** which afford a safe support.

FIGS. 3 to 5 show an embodiment of the stand according to the invention when adapted for supporting a saxophone in upright position. Again the several parts are connected by hinges in order to form a knock-down mechanism which enables the user to set up the stand or knock it down in a single movement.

Referring now to FIGS. 3–5, the stand is shown to comprise four pieces connected to each other by hinges. Two standards **19** and **21** have each a leg portion **20** and **22** extending therefrom at an angle. Standards **19** and **21** are connected by a hinge **23**.

Two more legs are designated by **24** and **25**; **24** is connected to leg portion **20** of standard **19** by hinges **26** and **27**, while leg **25** is connected to leg portion **22** of standard **21** by hinges **28** and **29**. Legs **24** and **25** are interconnected by another hinge **30**.

The standards **19** and **21** and the legs **24**, **25** are joined by hinges **23**, **26**, **27**, **28**, **29**, and **30** to form an articulated chain so that they can be brought into any desired position.

The stand may be operated as follows:

When it is desired to change from the collapsed position illustrated in FIG. 4, to a position of use, the two standards **19** and **21** are spread apart. By this movement, legs **24** and **25** are moved inwardly by hinges **26**, **27**, **28**, **29**, and **30** and take up the positions shown in FIGS. 3 and 5. The stand is then ready for use. To change back into the collapsed position, the standards **19** and **21** are folded together, whereby the legs **24** and **25** are moved outwardly by hinges **26** to **30** and will again take up the position shown in FIG. 4.

The above plurality of hinges forms a simple folding mechanism, which enables the user to change the position of the stand by a single movement, according to the requirement at a given time.

Due to the fact that the stand according to the invention is made of plastic material, it is of light weight, takes up small space in shipping and storage, and is not likely to damage the instruments or other objects supported thereby.

Due to its unique construction, the stand is useful for a wide variety of purposes and is capable of forming a very stable support.

It should be understood that the foregoing disclosure relates only to preferred embodiments of the invention and that it is intended to cover all changes and modifications of the examples of multiple purpose stands described which do not constitute departures from the spirit and scope of the invention as set forth in the appended claims.

What is claimed is:

1. A collapsible stand for resting musical instruments in substantially upright position which comprises two standards, means for rigidly connecting said standards near the top end thereof, a two-piece bridging member between said standards, hinges on said two pieces for connecting the same to each other and to said standards, said bridging members being operable to extended position, whereby said standards are automatically spread apart, and to folded position respectively, whereby said standards are automatically folded together, each standard having an opening therein for receiving one of the bridging portions in said folded position.

2. A collapsible stand as claimed in claim 1, wherein said standards have substantially horizontally extending leg portions thereon and said leg portions have hemispherically shaped ends to provide a four-point support for said stand in position of use.

3. A collapsible stand as claimed in claim 2, wherein said leg portions have recessed upper edges conforming substantially to the shape of an instrument to be rested thereon.

4. A collapsible stand for resting musical instruments thereon which comprises two standards, hinge means for interconnecting said standards, a leg portion formed on each of said standards extending at an angle thereto, two additional legs, hinges for connecting each of said additional legs to one another and to one leg portion on one standard, said standards, said leg portions thereon, and said additional legs being operable to extended position forming a triangular stand, and to collapsed position, respectively.

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