March 18, 1969 H. S. DOWNING 3,433,445

CHILD'S CLOTHES RACK

Filed March 17, 1967

Fig-1.

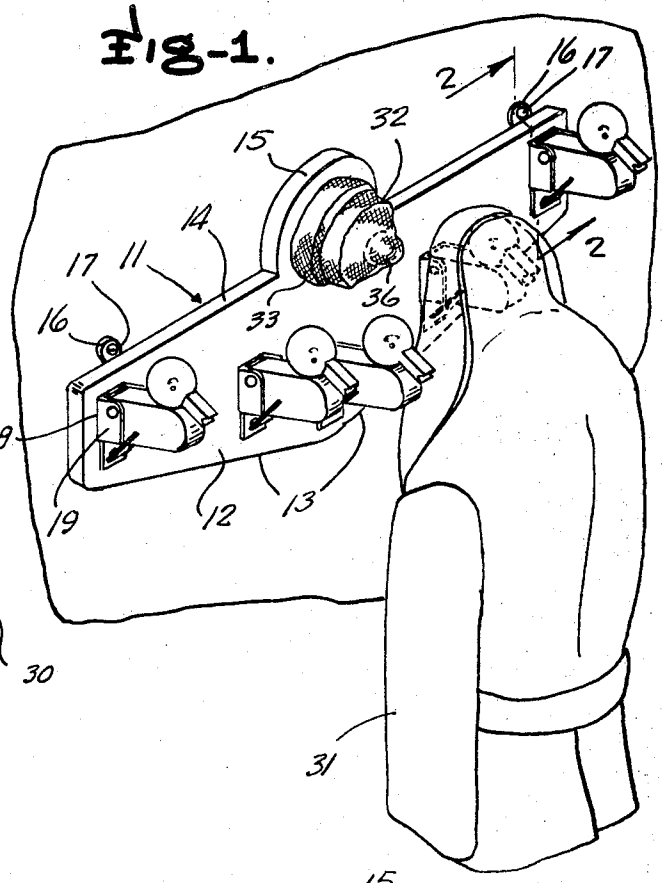


Fig-2.

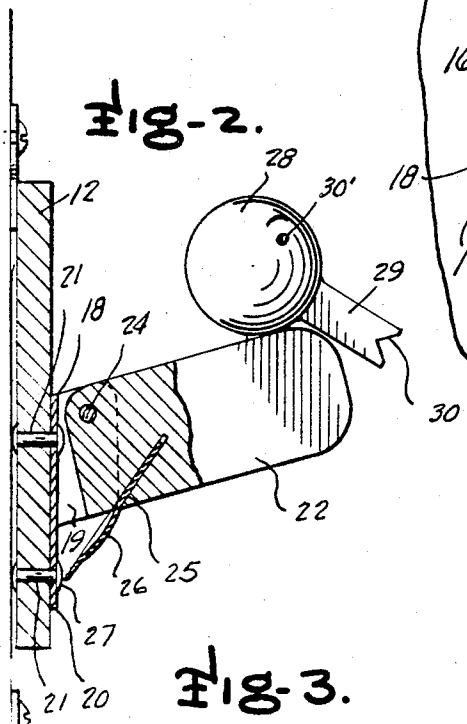
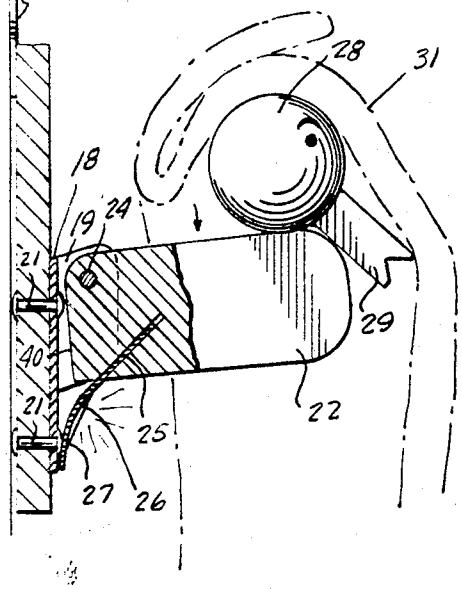


Fig-3.



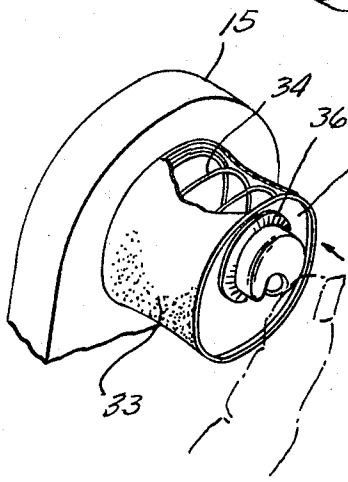


Fig-4.

United States Patent Office 3,433,445
Patented Mar. 18, 1969

3,433,445

CHILD'S CLOTHES RACK

Hubert S. Downing, P.O. Box 627,
Fayetteville, N.C. 28032

Filed Mar. 17, 1967, Ser. No. 624,075
U.S. Cl. 248—291 5 Claims
Int. Cl. A47f 5/00

ABSTRACT OF THE DISCLOSURE

A child's clothes rack including a plurality of pivoted clothes-supporting bars normally supported in elevated positions by downwardly and inwardly-directed snap leaf springs of the type emitting a loud snapping sound when flexed beyond a "dead-center" condition, the bars causing the springs to flex to this condition in response to the weight of garments placed on the bars.

This invention relates to clothes racks, and more particularly to clothes racks of the type adapted to be used by children and having sounding means associated therewith.

A main object of the invention is to provide a novel and improved child's clothes rack which is relatively simple in construction, which is easy to install, which is highly decorative in appearance, and which provides characteristic sounds responsive to the placement of clothes thereon or removal of clothes therefrom, whereby the clothes rack is especially suitable for use in children's closets, kindergarten classes, or similar locations where children's clothes are to be hung.

A further object of the invention is to provide an improved children's clothes rack having sounding means associated therewith which operate in response to the placement of clothes thereon ort he removal of clothes therefrom to emit characteristic sounds resembling the sounds of animals, such as ducks, or the like, the clothes rack being attractive in appearance, being inexpensive to manufacture, and being very durable in construction.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawing, wherein:

FIGURE 1 is a perspective view showing an improved child's clothes rack constructed in accordance with the present invention, shown mounted on a wall and illustrating the manner in which a garment is supported on one of the bar elements thereof.

FIGURE 2 is an enlarged vertical cross-sectional view taken substantially on the line 2—2 of FIGURE 1, and showing the normal position of a garment-supporting bar member.

FIGURE 3 is a vertical cross-sectional view, generally similar to FIGURE 2, but showing the position of the supporting bar member when loaded with a garment.

FIGURE 4 is a fragmentary perspective view, partly broken away, of the auxiliary sounding member employed on the child's garment rack of FIGURE 1.

Referring to the drawing, the improved clothes rack is designated generally at **11** and comprises a plate-like main supporting member **12** which is of substantial length and which may be of any suitable shape, for example, may be formed with the downwardly-convergent bottom edges **13, 13** and with the horizontal top edge **14** provided at its center with the upstanding lug portion **15**. The supporting plate member **12** is provided adjacent its upper top corners with respective hanger loop members **16, 16** for fastening the clothes rack to a wall, for example, by means of attaching screws **17**.

Suitably-secured to the plate-like main supporting member **12** and spaced horizontally therealong are a plu-

rality of vertical U-shaped brackets **18**, each bracket comprising a pair of outwardly-facing parallel, vertical side flanges **19, 19** and a depending tongue element **20** formed integrally with the bight portion of the bracket member **18** and being a downward extension thereof. The bracket member **18** may be secured to the plate-like main supporting member **12** by a pair of rivets **21, 21** engaged through the bight portion and extension **20** of the member **18**, as is clearly shown in FIGURES 2 and 3.

Pivotally-mounted in each bracket member **18** is an outwardly-projecting bar element **22**, the upper inner corner portion of the bar element being pivotally-connected between the upper potrions of the side flanges **19, 19** of the associated bracket **18** by a transverse pivot pin **24**, as is clearly shown in FIGURE 2 and 3. Rigidly-secured to each bar member **22** is a downwardly and inwardly-extending leaf spring **25** of the type formed at its intermediate portion with a warp or bulge **26** which acts to stiffen said intermediate portion of the leaf spring relative to the remainder thereof as well as creating a configuration whereby the spring will suddenly snap when it is flexed beyond a "dead-center" condition. In the normal position of the parts shown in FIGURE 2, the bottom edge of the downwardly and inwardly-inclined snap spring **25** bears on the head **27** of the lowermost rivet **21**.

Rigidly-secured to the forward end portion of the top surface of each bar **22** is a spherical knob or head element **28**, and secured to the downwardly-facing forward surface portion of each head member **28** is a downwardly and forwardly-directed bar element **29** having a V-notch **30** in its forward end, whereby the bar **22**, head **28**, and auxiliary bar element **29** provide a configuration generally resembling the head and body of a duckling or similar animal. This resemblance may be further accentuated by painting or otherwise suitably marking the spherical head element **28** with indicia **30'** such as simulated eyes.

As shown in FIGURE 2, each snap spring **25** normally supports its associated bar member **22** in an upwardly and forwardly-directed position. When a garment **31** of substantial weight is placed over the bar **22** and head portion **28** thereon, as shown in dotted view in FIGURE 3, the weight of the garment may be sufficient to swing the bar member **22** downwardly and to apply sufficient force to its associated snap spring **25** to flex same past its "dead-center" condition, causing the spring to emit a loud quacking sound, resembling the sound made by a duck. If the weight of the garment **31** is, in itself, insufficient to cause the spring **25** to be flexed beyond its "dead-center" condition, a downward pull on the garment **31** will accomplish the desired and necessary downward movement of the associated bar member **22** to produce the quacking sound.

A similar effect occurs when the garment **31** is removed, since upon the removal of the weight from the associated bar member **22**, the snap spring **25** is released and snaps back from the position thereof shown in FIGURE 3 to the normal position thereof shown in FIGURE 2, again emitting a loud quacking sound.

The sound effect as produced by the act of placing a garment on the clothes rack, and removing the garment therefrom makes the device of great interest to children and stimulates a child's interest in hanging his clothing on a clothes rack when he takes them off, and encourages habits of neatness in the disposition of his clothing.

An auxiliary sounding device **32** may be mounted upon the upstanding lug portion **15** of the main supporting plate **12**, for example, a conventional squeeze-type sounding device comprising a flexible housing or cover **33** secured over a coiled spring **34**, the housing having a rigid front wall **35** on which is mounted a conventional

air-operated whistle or sounding device **36** of any suitable type, for example, of the reed type, provided with a vibratory sounding element adapted to emit a sound resembling the sound of a quacking duck, or similar animal. The sound is produced by the passage of air through the device **36**, and this occurs when the device, which resembles a push button, as shown in FIGURE 4, is pushed inwardly and released, for example, by pressing the same with a finger and then removing the finger, as indicated in dotted view in FIGURE 4. The auxiliary sounding device **32** may be used by the teacher or other person in charge of the children to provide a signal or characteristic sound which reminds the children to hang up their clothes, or to remove their clothes from the clothes rack.

It will be noted that the pivot pin **24** is located sufficiently close to the bight portion of the bracket member **18** so that the associated snap spring **25** is protected against excessive flexure by the proximity of the rear end **40** of the bar member **22** to the bight portion of the bracket member **18**. Thus, in the event of an excessive load on the bar member **22**, the bottom inner corner portion of the bar member rotates inwardly into abutment with the bight portion of the bracket member **18**, whereby the load is transferred directly from the bar member to the support plate **12**. The spring **25** is sufficiently resilient so that it will restore itself to the normal position thereof shown in FIGURE 2 when the load is removed from the hanger bar **22**.

While a specific embodiment of an improved child's clothes rack has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. A child's clothes rack comprising a main plate-like support, pivot bracket means on the support, an outwardly-extending bar element pivotally-connected to said pivot bracket means for rotation on a horizontal axis parallel to the support, and a sounding snap leaf spring mounted between the bottom of the bar element and the support and being mounted so as to support the bar element in an outwardly-projecting upwardly-inclined position and to flex responsive to the weight of a garment placed on the free outer end portion of the bar element, wherein the snap leaf spring is secured in the bar element and extends downwardly and inwardly from the bottom surface thereof toward the support, wherein said pivot bracket means includes a pair of parallel flanges, the bar element being received between said flanges and being pivotally-connected thereto by a horizontal pivot pin, and wherein said pivot bracket means is substantially U-shaped and includes a tongue element depending from the bight portion thereof, the tongue element being provided with a fastening element connecting same to the support, said fastening element having an exposed head, the bottom edge of the snap spring normally bearing on said exposed head.

2. The child's clothes rack of claim **1**, and an upstanding knob-like head element secured on the forward end portion of the bar element.

3. The child's clothes rack of claim **1**, and wherein the pivot pin extends through the upper inner corner portion of the bar element and wherein the lower inner corner portion of said bar element is rotatable into abutment with the bight portion of the pivot bracket means.

4. The child's clothes rack of claim **3**, and an upstanding substantially spherical head element secured on the upper forward corner portion of the bar element.

5. The child's clothes rack of claim **4**, and a manually-operated auxiliary sounding device mounted on the main support.

References Cited

UNITED STATES PATENTS

749,482	1/1904	Geistert	46—189
1,198,008	9/1916	Clive	248—294
1,891,219	12/1932	Baker	46—189
2,518,390	8/1950	Slauson	46—189
2,602,622	7/1952	Smith	248—293

ROY D. FRAZIER, *Primary Examiner.*

J. FRANKLIN FOSS, *Assistant Examiner.*

U.S. Cl. X.R.

211—99; 46—189