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HOLDER AND ANTI-SWAY MEANS FOR TROLLEY

Filed May 24, 1962

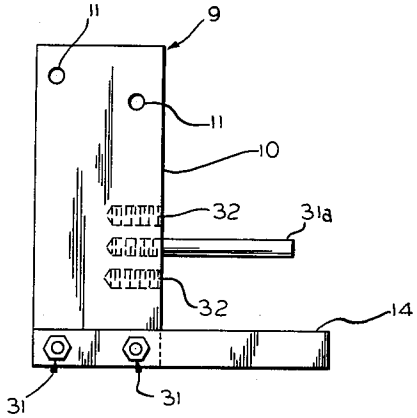


FIG. 1

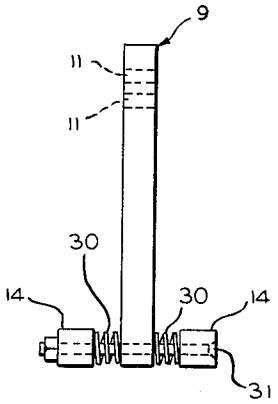


FIG. 2

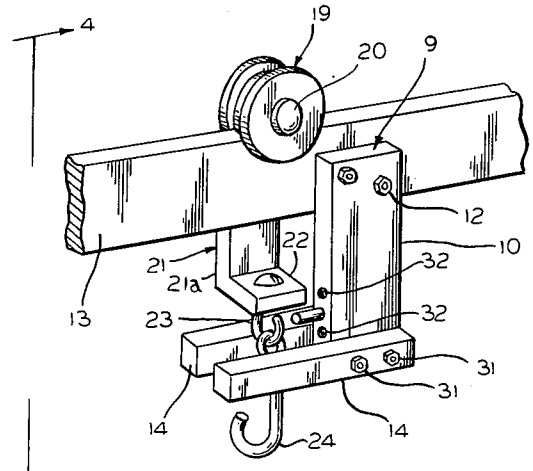


FIG. 3

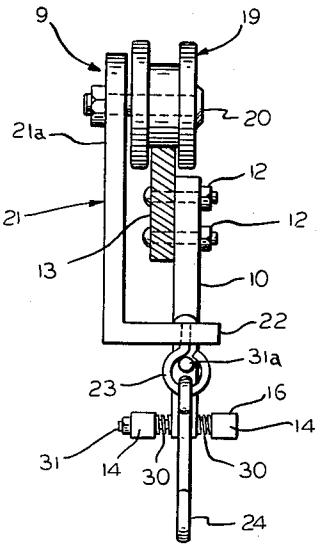


FIG. 4

INVENTOR.
LAWRENCE J. KNIPPEL

BY Irwin C. Alter
ATTORNEY

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HOLDER AND ANTI-SWAY MEANS FOR TROLLEY

Lawrence J. Knippel, W. 189, 5-7603 Circle Drive, Muskego, Wis.

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My invention relates to hook supports for overhead rails and more particularly to a hook support that will retain the hook to prevent it from swaying in a horizontal direction.

The prime object of my invention is to provide a stationary fixture, attached to an overhead rail, that will act as a means to support the conveying fixture, and retain it in a position so that it will not sway or move in a horizontal direction.

Another object of my invention is to provide a device of the character described, that may be locked or latched, while the load or object being conveyed, is being processed.

It is common practice to employ rotatably mounted conveyors that are channelled and guided by an overhead rail for supporting a plurality of objects, or products, suspended from the conveyor. Quite frequently it is necessary to process the suspended object, and it is the object of my invention to provide a rigid guide attached to the rail to accommodate the portion of the conveyor, supporting the object or product, while it is being processed. This is especially true in meat packing plants, or the like, where the portions are conveyed by carriages, suspended from an overhead rail.

The device is simple in construction, economical to manufacture and serves a very practical purpose.

Other and further objects of my invention will become more apparent as the description proceeds, when taken in conjunction with the drawings, in which:

FIGURE 1 is a side elevational view of the device constituting my invention,

FIGURE 2 is a rear elevational view of the device illustrated in FIGURE 1,

FIGURE 3 is a perspective view showing the portion of an overhead rail having my device attached thereto to receive the hook of a conveyor suspended from said overhead rail, and

FIGURE 4 is a front elevational view of FIGURE 3 taken on a plane passing through the line 4—4 perpendicular to the overhead rail and looking in the direction of the arrows.

Similar characters of reference indicate corresponding parts throughout the several views, and referring now to the same, the character **9** shows a means for retaining a support member which is movably associated with a conveyor rail and has a vertical member **10** provided with apertures **11**, for attaching by means of bolts **12** to a conventional conveyor rail shown as **13**. The vertical member extends downward along one side of the rail, as illustrated in FIGS. 3 and 4.

The lower end of the member **10** is equipped with a pair of horizontal guides **14** attached thereto by adjustable nut and bolt combinations **31** extending through the horizontal guides and member **10** as illustrated in the drawings. Springs **30** are interposed between each side of the member **10** and the horizontal guides **14** whereby the horizontal guides can be spaced apart different distances to accommodate different sized hooks therebetween. A pin member **31***a* is threadedly fastened to the member **10** as illustrated in FIGURES 1 and 3 at one side thereof to prevent a support member from swaying by protruding through an opening in the support member when the support member is being retained. FIGURE 4 illustrates my device in such a position.

The overhead rail **13** supports a plurality of means for retaining support members such as the carriage assemblies **9** (only one shown) consisting of a channelled rotating wheel **19** attached rotatably by the bolt **20** to a yoke member **21** which consists of a vertical portion **21***a* integrally provided with a horizontal portion **22**. The horizontal portion **22** is shown pivotally supporting a loop **23** which in turn supports a support member or a hook **24**. The hook is employed to support the product or object being conveyed on the rail. However, any known support means can be employed. The yoke means in this embodiment is shown extending downward along the side of the conveyor rail **13** that is opposite to that side which the vertical member **10** extends downward along.

Obviously the entire carriage assembly rolls on the wheel **19** contacting the upper edge of the rail **13** and is free to swing in any direction when the weight of the object (not shown) is being conveyed. However, when the hook is retained within the confines of the horizontal guides **14** and the pin **31***a* is protruding through the loop **23** the object being conveyed will be held in a position where it will not sway or move in a horizontal direction when it is being processed or worked on.

It should be understood that this invention should not be limited to the vertical member extending from the conveyor rail downward, as it may extend in different directions depending on how the support means is conveyed. The statement also holds true for the horizontal guide means. These guide means may be disposed in a number of positions just as long as they are not proximately disposed with relation to the support means and they are adjustably fastened to the member **10** to enable accommodating different sized support means. Also, the pin **31***a* must be disposed in a position to protrude through an opening in the support member and therefore the threaded portions **32** can be disposed in any number of positions other than those shown in the drawings to enable the pin means **31***a* to function as it is herein intended.

The entire device constituting my invention is exceedingly simple, yet serves an important function, and it is manifest to anyone familiar with its use, that the relative shape and contour, or arrangement, may be varied yet serve the same purpose, and I therefore reserve the rights to make changes that I may deem convenient, without departing from the spirit of my invention, or the scope of the appended claims.

I claim:

1. Means for retaining a support member in a fixed position without swaying in a horizontal direction, said support member being associated with a conveyor rail to move along said conveyor rail while having an article suspended therefrom, comprising: a vertical member attached to and extending from said conveyor rail, and a pair of horizontal guides adjustably attached at one end thereof to both sides of said member, said guides having springs interposed between said member and said guides, said guides being associated with said member by having a nut and bolt combination extending therethrough and through said member whereby said nut and bolt combination can be adjusted to enable said guides to have a preselected opening therebetween and when said support member is positioned in said opening between said guides said support member is retained in a fixed position with respect to the horizontal direction.

2. Means for retaining a support member in a fixed position in a vertical direction without swaying, said support member being associated with a conveyor rail to move along said conveyor rail while having an article suspended therefrom, comprising: a vertical member attached to and extending downward from said con-

veyor rail, and a pair of horizontal guides adjustably attached at one end thereof to both sides of said member, said guides having springs interposed between said member and said guides, whereby said guides have an adjustable opening therebetween and when said support member is positioned in said opening between said guides said support member is retained in a fixed position with respect to the vertical direction without swaying.

3. Means for retaining a support member, as defined in claim 2, wherein said vertical member has pin means disposed to protrude through said support member for preventing said support member from swaying in a horizontal direction when it is being retained between said horizontal guides.

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