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2,511,451

SUPPORT FOR DRUMS

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Fig. 1.

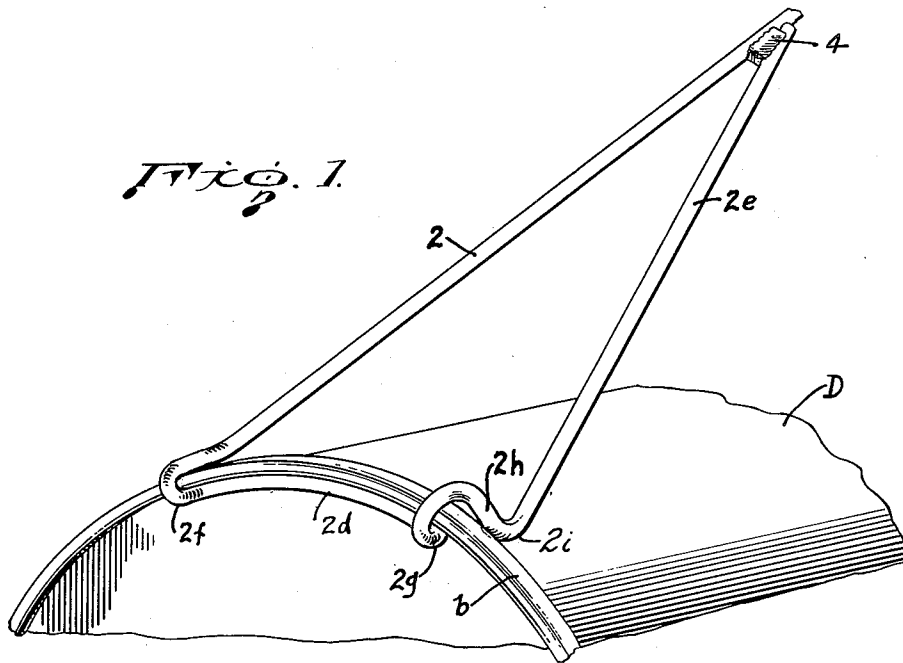


Fig. 2.

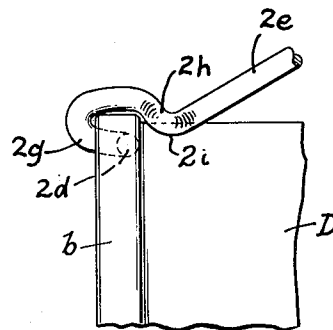
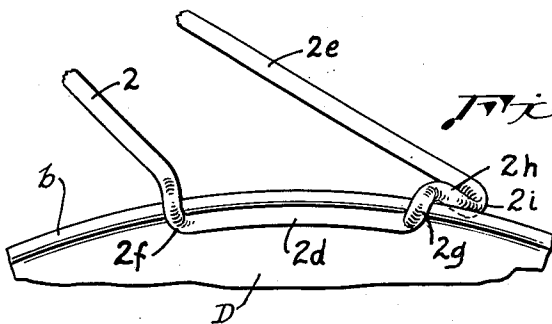


Fig. 4.

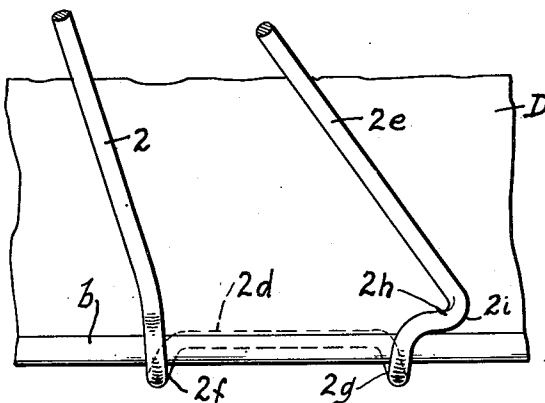


Fig. 3.

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SUPPORT FOR DRUMS

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3 Claims. (Cl. 248—201)

1

This invention relates to an improved support for drums of the type frequently used for storing fuel oil, and constitutes an improvement on the support disclosed in my prior Patent 2,295,318, granted September 8, 1942.

Such supports are commonly used in pairs in relatively crossed formation, having their upper ends secured to the side of a building or other object, and their lower end portions terminating in hook elements engaging the flanges at the opposite ends of the drum and thereby supporting same.

In my aforesaid patent I provided a rigid finger or locking element associated with each such hook element to engage the inner edge of the external beading of its respective flange, and thereby prevent disengagement of the hook element from the flange in the operative position of the support. In my prior patent the arrangement of the locking element or finger was such as to require the complete support to be fabricated from two sections of rod-like stock rigidly connected at two separate points, as by welding.

The primary object of the present invention is to provide a generally similar support embodying all of the functions and advantages of my prior construction, but which is formed from a single integral length of stock requiring only one welded joint, thus resulting in a considerably more economical, simpler, and generally stronger device.

Further objects are to provide a support which is formed by bending the stock to the desired shape and wherein various sections function as a hook element to support the drum, while another integral section of the support serves as the locking element aforementioned; also to provide a support in which the projecting finger of the prior patent is eliminated, while the remaining elements or portions are modified to perform the function of such a finger.

The preferred embodiment of my invention is illustrated in the accompanying drawing, in which:

Figure 1 represents a perspective view showing the hook portion of a support embodying my invention as applied in operative relation to one end portion of a usual drum;

Figure 2 is a fragmentary end elevation showing the lower end of the support operatively positioned on the drum;

Figure 3 is a fragmentary plan view of the support and drum as shown in Figure 1; and

Figure 4 is a fragmentary side elevation show-

2

ing the end of the support in operative engagement with the drum.

Referring now in detail to the accompanying drawing, the reference character D therein designates a drum of the type usually employed for storage of fuel oil. This drum is cylindrical in shape and is provided with cylindrical flanges at each end. These flanges have external beads b projecting beyond the exterior cylindrical surface of the drum, as may be seen by reference to Figure 4.

The improved supports of my invention are adapted for use in pairs, in crossed relation with their free ends suitably secured to the side of a building or other supporting object, while their lower ends are formed to engage and support opposite ends of the drum, all as generally shown and described in my prior Patent 2,295,318.

Inasmuch as my present invention relates only to the formation of the lower end or drum engaging and supporting portion of such a support, and such formation will be similar though relatively reversed in the individual supports of each pair to conform to the opposite ends of the drum, I herein show and describe in detail only that portion of a single such support embodying my invention.

Such a support in accordance with my present inventive concept is formed from a single integral length of rod stock which has one end thereof reversely bent and welded or otherwise fixedly secured to the remainder thereof, as at 4, to form a closed loop preferably of substantially triangular configuration having relatively angularly disposed sides 2 and 2e converging at said weld 4, and a base 2d connecting said sides.

The base 2d and relatively adjacent portions of the respective sides are bent back out of the plane of the loop to form a hook element embodying hooks 2f and 2g formed in sides 2 and 2e of the triangle and the base 2d which engages the inner curved wall of the cylindrical flange and preferably is shaped to conform to the curvature of this flange, as in Figures 1 and 2.

The locking element of the instant invention may be embodied in either or both of the sides 2 or 2e, though the inclusion of the locking portion in only one side will suffice and permits a more economical construction. Accordingly, in the instant embodiment, such a locking element or section, is included in the side 2e of the triangle.

Such a locking section or element comprises a portion 2h which is bent transversely to the upper portion of said side and supports the lower hooked end 2g thereof in relatively offset relation. It will

3

be noted that the section 2*h* constitutes a continuation of the hook portion 2*g* extending across the beading *b* and curving downwardly into the open loop 2*i* where the section 2*h* joins the straight side 2*e*. The outer part of loop 2*i* engages the inner side of the beading *b* and serves the same function as the locking finger of my prior patent. The arrangement is such that in operation the element 2*h* will extend across the exterior beading *b* at its end of the drum and the loop 2*i* will engage the inner edge of the beading and prevent accidental release of the hook element from beneath the flange when the support is inclined to the axis of the drum as shown in the drawing.

Such a supporting member is applied to a drum and used in the same manner as described in my Patent 2,295,318. To briefly summarize such use: Each support or suspension member is separately applied to its respective end of the drum by bringing the lower hook element thereof into contact with the flange on the drum, while maintaining the triangular loop in a plane substantially normal to the axis of the drum. Then, while maintaining the hook element in engagement with the flange, the support is tilted towards the center of the drum to a position where it extends diagonally to the drum axis and the locking element 2*i* projects behind the beading *b* to engage the inner edge thereof and lock the hook element against removal while in its inclined operative position. Another support may then be applied in similar manner to the other end of the drum, so that when both supports are operatively applied to the drum, the two supports are in crossed relation. As thus arranged, the upper ends of the two supports, which are not shown, are anchored to a suitable supporting object, such as the wall of a building, to suspend the drum above the ground.

It will be apparent that, as in my earlier patented construction, the locking elements 2*i* will prevent the lower hooked ends of the respective supports from swinging out of engagement with the flange, and disengagement may be accomplished only by releasing the upper ends of the supports and swinging them outwardly.

It will be further apparent that the improved locking loop 2*i* of my present invention serves the same function as its similarly designated counterpart in my aforementioned patent, but is more simply and economically formed as an integral part of one of the sides of the triangle. Or, restated, the locking element such as illustrated and described in my prior patent is entirely eliminated, while the side of the loop or triangle is modified in structure to perform the function

4

heretofore performed by such a projecting locking element.

In addition the integral construction of my improved support may be more economically produced, due to the elimination of one of the welds required in my earlier construction, and will generally result in a sturdier device.

I claim:

1. In a support for a drum having externally beaded flanges on the ends thereof, a rigid suspension member comprising an integral length of rod stock, one end thereof being reversely bent and welded to the medial portion of said stock to form a closed loop of substantially triangular configuration, said loop comprising relatively angularly disposed sides converging at said weld, and a base connecting the sides, the base and adjacent portions of said sides being bent to form a hook element for extending beneath said flange, a portion of one of said sides adjoining said hook element being bent to extend from said loop across the external beading of the drum and joining the main portion of said side in an open loop extending below the top of said beading and engaging the inner edge of said beading in the operative position of said support.

2. In a support for a drum having externally beaded flanges on the ends thereof, a rigid suspension member comprising an integral length of rod stock bent in the form of a substantially triangular loop, said loop comprising relatively angularly disposed sides and a base connecting the sides, the base and adjacent portions of said sides being bent to form a hook element for extending beneath said flange, a section of one of said sides adjoining said hook element being bent to extend from said loop across the external beading of the drum and joining the main portion of said side in an open loop extending below the top of said beading and engaging the inner edge of said beading in the operative position of said support.

3. A support according to claim 2 wherein said open loop is relatively offset with respect to the adjacent end of said hook element and engages the inner edge of said beading at a point displaced along said beading with respect to the adjacent end of said hook element.

LAWRENCE MORSE ABLE.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
2,295,318	Able	Sept. 8, 1942