

Jan. 9, 1940.

E. W. DEUEL

2,186,238

LADING BRACING

Filed Aug. 22, 1938

2 Sheets-Sheet 1

Fig. 1.

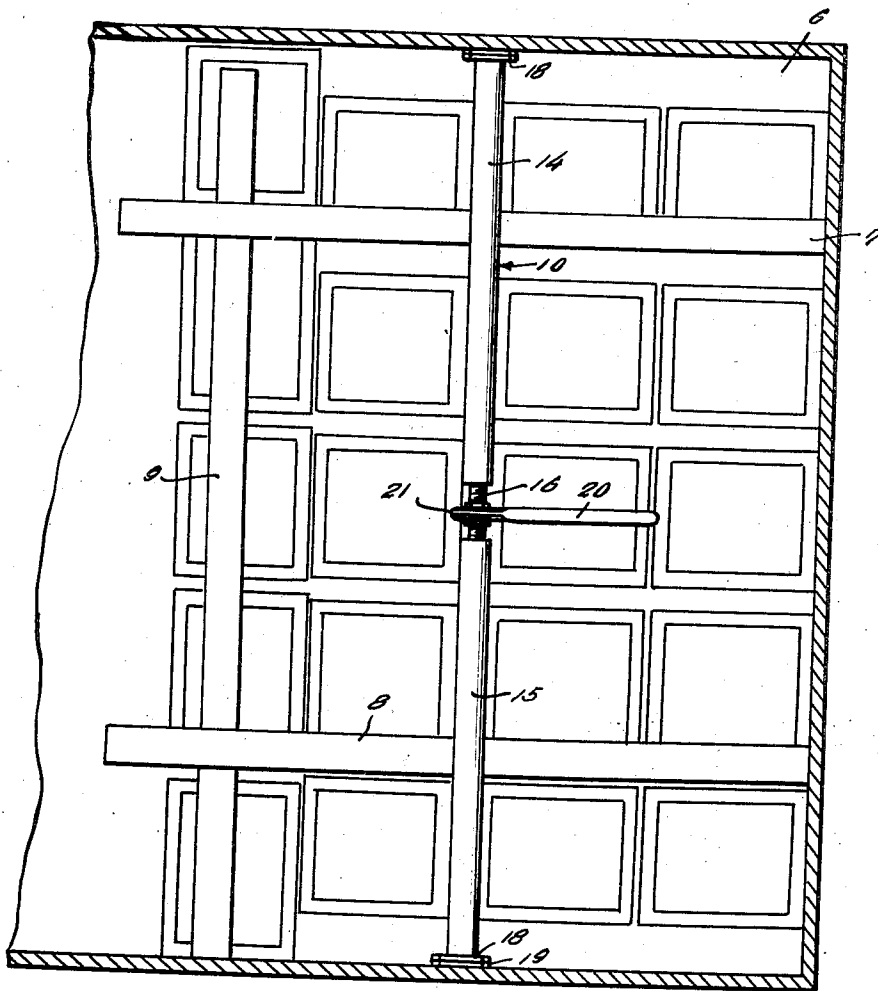
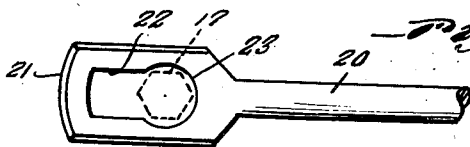


Fig. 5.



Inventor

E. W. Deuel

By

Clarence A. O'Brien
and Hyman Berman
Attorneys

Jan. 9, 1940.

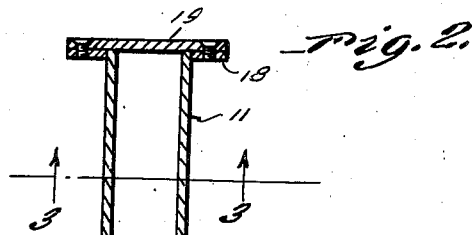
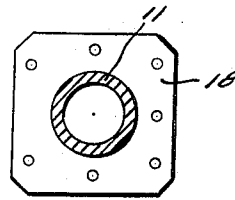
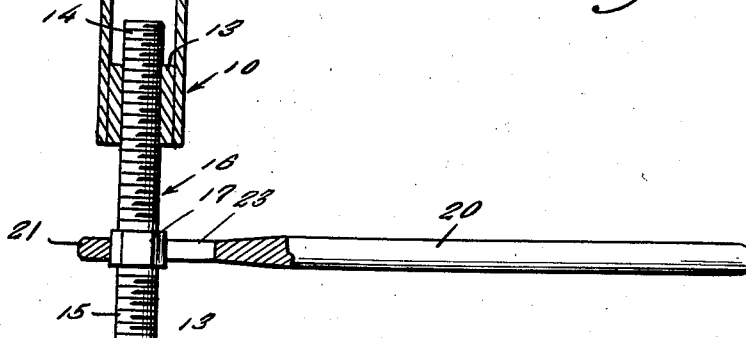
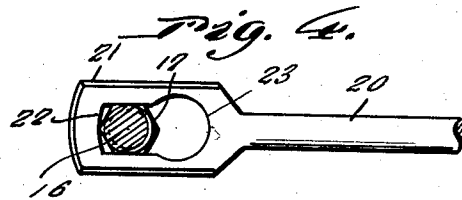
E. W. DEUEL

2,186,238

LADING BRACING

Filed Aug. 22, 1938

2 Sheets-Sheet 2



Inventor

E. W. Deuel

By

Clarence A. O'Brien
and Hyman Berman
Attorneys

UNITED STATES PATENT OFFICE

2,186,238

LADING BRACING

Edward W. Deuel, Pueblo, Colo.

Application August 22, 1938, Serial No. 226,193

1 Claim. (Cl. 254—100)

This invention relates to a structurally distinct, new and useful device expressly constructed with the thought in mind of temporary use if and when needed to facilitate holding otherwise shift-
5 able commodity crates and containers in place in so-called part carloads during freight switching movements.

The practice in vogue at the present time for the protection of such lading in partial carloads is to build a rather bulky and sometimes intricate barrier out of lumber, or to break the load down into more substantial stacked or compact loaded arrangement. Obviously, a lumber barrier entails expenditure for labor and material and
10 oftentimes damages the interior of freight cars. It follows therefore, that the present invention has to do with simple stabilizing and bracing means designed for adequate protection of the part load during team track or industry switch
15 moves. That is to say, we are concerned with a simple structure susceptible of being set up and knocked down by a single attendant in approximately one minute.

The invention as shown from actual use and
25 experimentation, has been found to be particularly useful at perishable loading and unloading points where it is necessary to make switch moves to pull out full loads or empties, or diverted cars, and part loads moving across transfers, or to
30 other locations to complete loading. In addition, the invention is susceptible of adequate use to separate and hold lading in less than carload merchandising and transportation systems involving motor trucks and analogous and equivalent conveyances.

In reducing to practice the principles adopted as satisfactory in perfecting the invention in its preferred form I have found it expedient and practicable to utilize a simple jack and hand tool
40 arrangement readily employable in connection with a simple lumber barrier, this having been found resultful and adequate for ordinary purposes.

Other features and advantages will become
45 more readily apparent from the following description and drawings.

In the drawings, wherein like numerals are employed to designate corresponding elements throughout the views:

50 Figure 1 is a fragmentary view of a portion of a box or freight car showing a simple barrier and tiers or stacks of crates partly held in place thereby, the improved stabilizing and bracing adjustable jack being employed as an auxiliary adjunct
55 in the load retention means.

Figure 2 is a view in section and elevation showing the post-forming jack.

Figure 3 is a horizontal section on the plane of the line 3—3 of Figure 2.

Figure 4 is a detail section showing the shift-
5 able hand tool and illustrating how it is used.

Figure 5 is a view similar to Figure 4 showing the tool shifted, the adjacent part of the jack being disclosed in phantom or dotted lines.

Obviously, different loading systems are employed and for that reason it is unnecessary to go into detail about shelving arrangements and supporting cleats used on vertical and horizontal walls of the freight car. In the drawings, a simple assemblage is depicted wherein the tiers
10 of crates or boxes 6 are stacked against one wall and partially held against accidental displacement or slippage by timbers 7, 8 and 9 nailed or otherwise secured together to provide the most simple type of load retention barrier. This barrier
15 is held against displacement by the improved jack or post forming the essence of this invention.

In Figure 2 the extensible and retractable jack or sectional post structure is generally denoted by
25 the numeral 10. It comprises companion substantially duplicate upper and lower tubular sections 11 and 12. The adjacent ends are fitted with bushings 13 screw-threaded to accommodate the left and right hand threads 14 and 15 of the
30 coupling and feed screw 16. On the center portion of this screw is an actuating nut 17 formed as an integral feature and this constitutes the means for turning the feed screw.

Flanges or collars 18 are attached to the outer
35 ends of the respective tubular members 11 and 12 and these serve to hold in place rubber disks 19 functioning as cushions to engage the floor and ceiling of the box-car as depicted in Figure 1.

The tool comprises a handle 20 having its substantially rectangular frame-like head 21. One
40 end of the slot in the head is restricted in shape and proportions as at 22 to operatively engage the nut 17. The other end is enlarged as at 23 and the two pieces 22 and 23 form a sort of key-
45 hole-shaped slot making it possible to manipulate the lever back and forth in a sliding and turning manner to function as a quick engaging and releasing wrench. This makes it possible to adjust the feed screw in limited space and time.
50

The device is set up to function as a temporary post in the box-car as shown in Figure 1 and it serves to maintain in place the bracings 7, 8 and 9, which in turn hold crates and other commodity
55 containers against endwise or other slippage. It

is susceptible of placement and removal in an extremely short period of time by a single attendant. Thus, while it seems to be quite a simple structure, it nevertheless constitutes the most adequate means known to me to perform in the capacity as stated in the introductory portion of the description.

It is thought that the description taken in connection with the drawings will enable a clear understanding of the invention to be had. Therefore, a more lengthy description is thought unnecessary.

While the preferred embodiment of the invention has been shown and described, it is to be understood that minor changes coming within the field of invention claimed may be resorted to if desired.

I claim:

A jack of the class described comprising a pair

of elongated tubular members, a flat flange forming member having a centrally arranged opening therein receiving the outer end of each tubular member, said flange forming members being attached to the tubular members, a bushing in the inner end of each tubular member having a threaded bore, an elongated screw-threaded member, the threads at one end being right handed and those at the other end being left handed, said threaded portions engaging the bores of the bushings, an enlarged non-circular part at the center of the screw-threaded member for receiving a tool for turning the threaded member and a cushion forming member fastened to the outer face of each flange forming member with a part of the cushion forming member extending across the open end of the tubular member.

EDWARD W. DEUEL.