

C. BACON.
BRACE FOR HOLDING BOXES AND CRATES IN RAILWAY CARS.
APPLICATION FILED MAY 20, 1915.

1,206,648.

Patented Nov. 28, 1916.
2 SHEETS—SHEET 1.

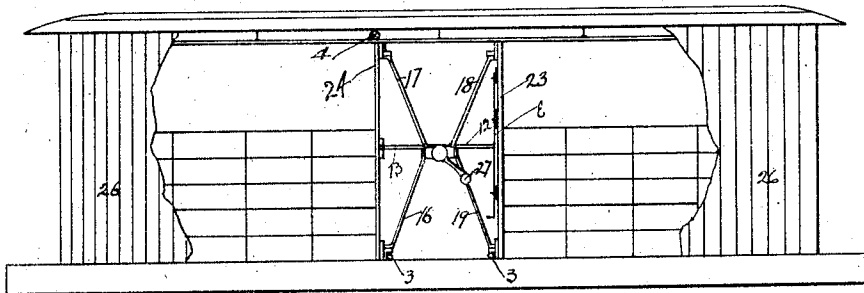


FIG 1

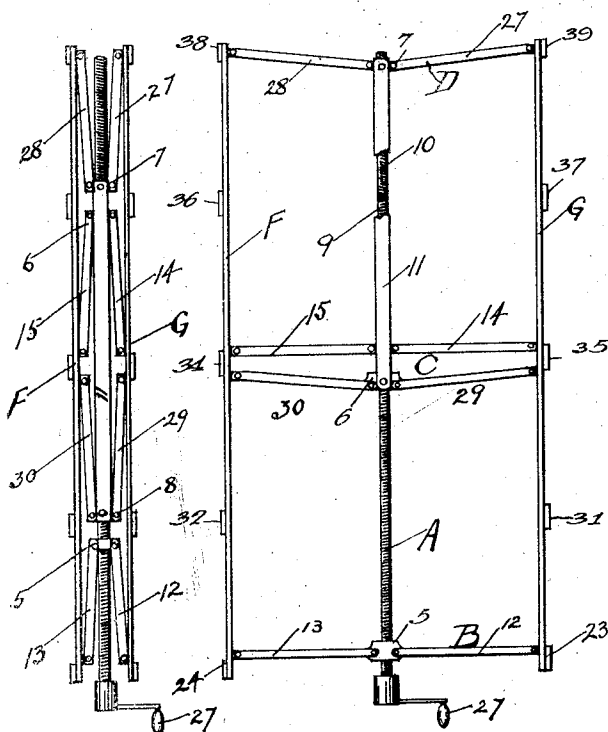


FIG 2

FIG 3

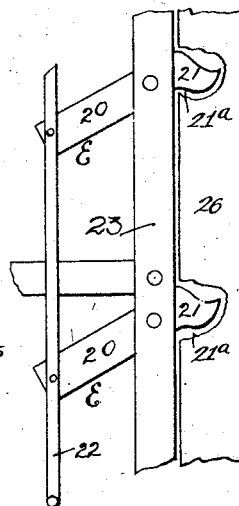


FIG 4

WITNESSES:

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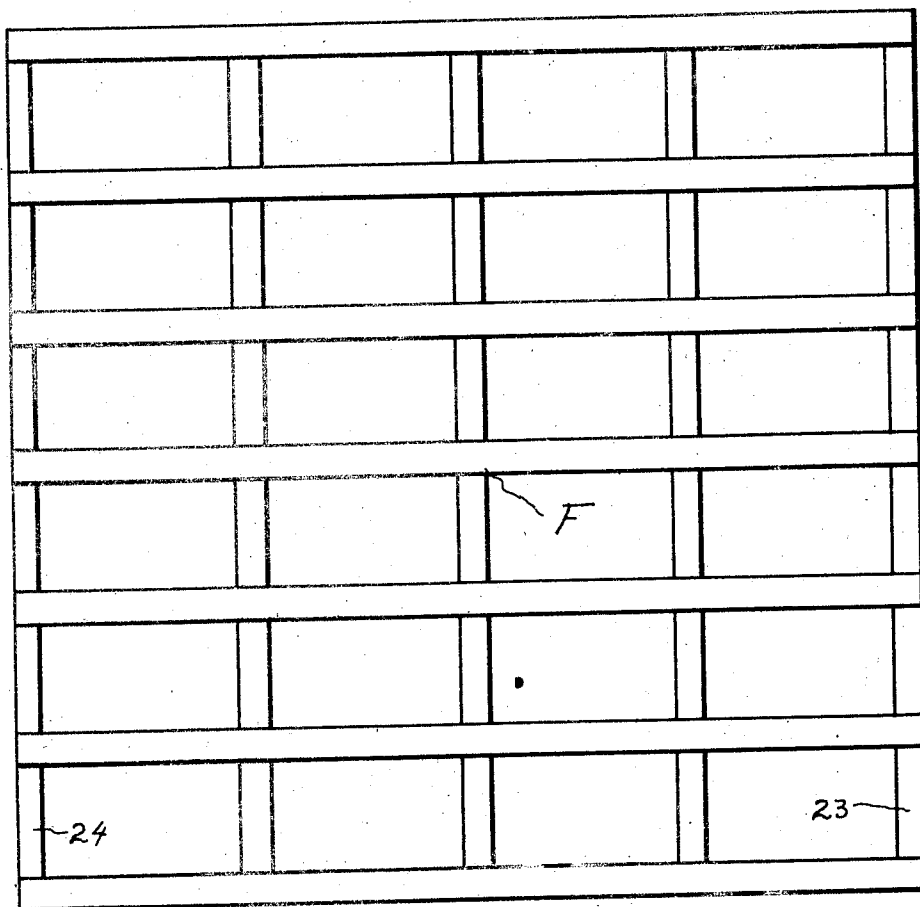


FIG. 5.

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UNITED STATES PATENT OFFICE.

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BRACE FOR HOLDING BOXES AND CRATES IN RAILWAY-CARS.

1,206,648.

Specification of Letters Patent.

Patented Nov. 28, 1916.

Application filed May 20, 1915. Serial No. 29,429.

To all whom it may concern:

Be it known that I, CHARLES BACON, a citizen of the United States, and a resident of the city of Fresno, county of Fresno, and State of California, have invented a new and useful Improvement in Braces for Holding Boxes and Crates in Railway-Cars, of which the following is a specification.

In packing or storing boxes and crates of merchandise in railway cars it is usual to stack them in tiers at each end of the car, and in order to keep such boxes and crates from jostling about they are braced.

In United States Patent No. 1,075,001 granted to me October 7, 1913, I disclosed a form of brace consisting of a frame work which hung down from the roof of the car between the tiers of boxes nearest the center of the car and which by means of a series of screws could be forced against the boxes, clamping them against the end of the car.

My present invention is an improvement on the patent heretofore referred to, substituting for the series of screws a set of toggle bars operated by a single screw, and having means thereon whereby the brace can be used to clamp the boxes or crates which may be piled in one end of the car independent of boxes which may or may not be piled in the other end of the car, and other purposes as hereinafter set forth.

In the drawing accompanying this specification Figure 1 shows an end elevation of the brace as placed in a railway car when in use. Fig. 2 is a top view of the brace when closed. Fig. 3 is a top view of the brace when opened. Fig. 4 is a detailed view of the device for locking the brace to the sides of the car when the brace is used for one side of the car independent of the other side. Fig. 5 is a view of one side of the brace.

In said drawings F and G are movable members each of which can consist of a solid wall, or strips of stiff material fastened together, the object being to have members which when forced against the tier of boxes will press evenly on each box.

3 are casters or rollers at the bottom of members F and G and are intended to aid in moving such members.

4 is a roller from which the brace is suspended from the top of the car. Member F has upright posts 24, 32, 34, 36 and 38, and member G has upright posts 23, 31, 35, 37 and 39.

A is a screw having a right hand thread

9 at one end thereof and a left hand thread 10 at the other end thereof.

5 and 6 are blocks having right hand female threads therein which will screw easily on threaded portion 9 of screw A.

27 is a handle for operating screw A.

7 is a block having left hand female threads therein which screws freely on portion 10 of screw A.

8 is a block having a hole therein of sufficient size to permit screw A to slide therein.

11 is a connection uniting blocks 7 and 8.

12 is a toggle bar pivoted at one end to block 5 and at the other end to the approximate center of post 23.

13 is a toggle bar approximately the same length as toggle bar 12, and extends from the approximate center of post 24 to the side of block 5 opposite to where toggle bar 12 is pivoted.

14 and 15 are toggle bars pivoted at one end to block 6 and at the other end to members F and G.

29 and 30 are toggle bars pivoted at one end to block 8 and at the other end to members F and G.

27 and 28 are toggle bars pivoted at one end to block 7 and at the other end to members F and G.

Toggle bars are of approximately equal lengths.

In order to have equal pressure on members F and G on the upper and lower and middle portions, toggles B have vertical braces 16 and 17 extending from the end of toggle bar 13 which is pivoted to block 5, to the lower and upper ends of post 24, and braces 18 and 19, which extend from the end of toggle bar 12 attached to block 5, to the upper and to the lower ends of post 23. Toggles C and D are likewise braced. This gives additional strength to the toggles and an even pressure on the entire faces of members 1 and 2 which is an essential feature in this form of brace.

26 is a portion of the wall of the car adjacent to the door, and 21^a are notches within said wall.

E is a lever pivoted to post 23, and consists of a handle 20 at one end, and a hook, or catch 21 at the other end. Catch 21 is formed so it will readily enter notch 21^a. The relation of the notches 21^a, and the levers E are such that when the brace is placed within the car with post 23 parallel with the line of such notches, and adjacent

thereto, by moving handle 20 so it extends outwardly from post 23, the catches 21 will enter notches 21^a, and when the handle is moved approximately parallel with post 23, the catches 21 will be withdrawn from such notches 21^a. There can be a plurality of levers E pivoted to post 23, in which case there should be a corresponding notch 21^a for each of said levers, and the handles 20 should be connected with a rod 22 for the purpose of making them work simultaneously. Posts 39, 24 and 38 should have a plurality of levers E pivoted thereto in a similar manner to those pivoted to post 23, above described. The object of this device is to securely fasten one of the members, either F or G, to the sides of the car so the brace can be used on tiers of boxes in one end of the car independent of the other end.

20 I claim as my invention:

1. A clamp for holding merchandise within a car consisting of two movable frames, toggle members between such frames, each toggle member consisting of two center blocks having holes therein, one having a right hand thread therein and the other a

left hand thread, a pair of toggle braces pivoted to each of such blocks, one of such toggle braces of each of such pairs being pivoted to each of such movable frames, 30 each of such toggle braces consisting of a plurality of toggle bars radiating from the block to which the brace is pivoted, and on a common plane, a screw having right hand threads at one end and left hand threads at 35 the other end constructed to cooperate with the threads in such blocks, all substantially as described.

2. A car brace consisting of two upright, parallel movable frames F and G, a plurality 40 of toggle braces connecting such frames F and G, such toggle braces being made operative by means of a screw having threads on one end thereof running in a different direction from the threads on the other end, and 45 catches for locking either of such frames to the walls of a car, all substantially as described.

CHARLES BACON.

Witnesses:

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