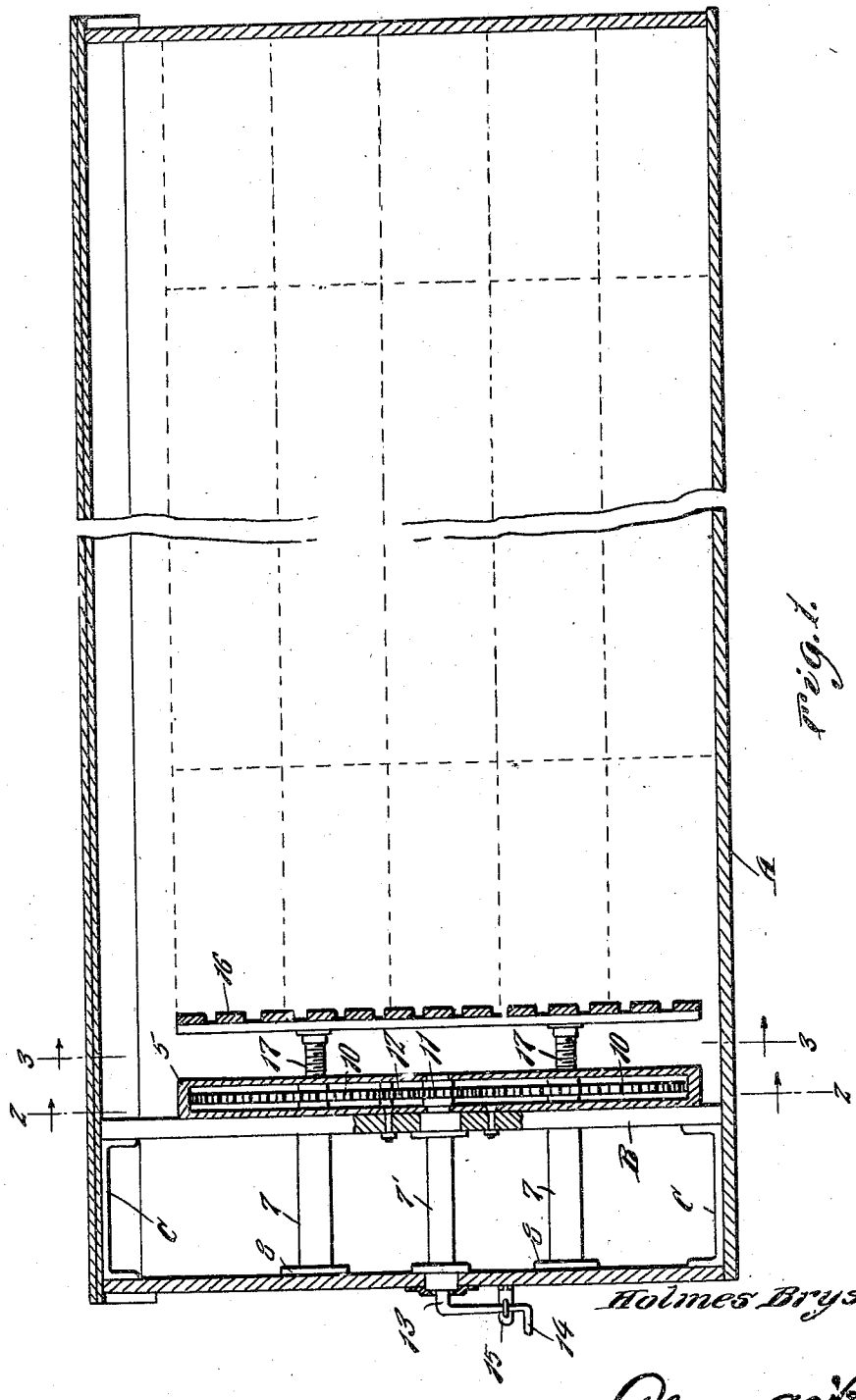
April 8, 1930. H. BRYSON 1,753,400

PRESSING INSTALLATION FOR FREIGHT CARS

Filed Nov. 6, 1928 3 Sheets-Sheet 1



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PRESSING INSTALLATION FOR FREIGHT CARS

Filed Nov. 6, 1928 3 Sheets-Sheet 2

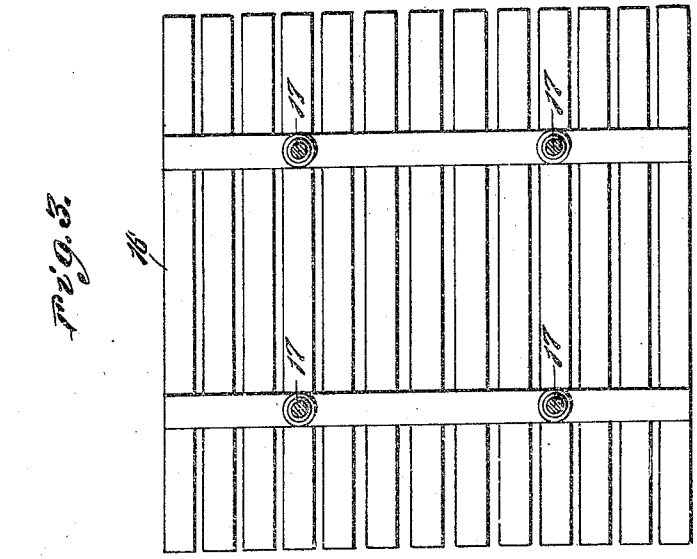


Fig. 2.

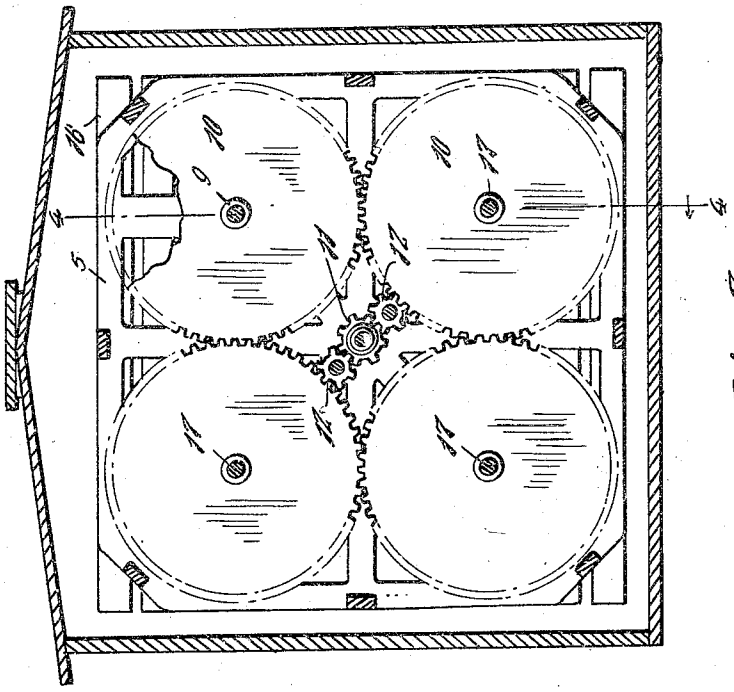


Fig. 3.

Inventor

Holmes Bryson

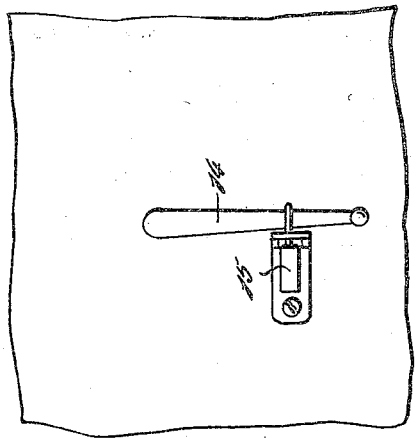
By Clarence A. O'Brien

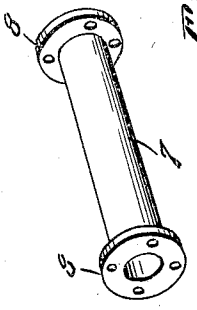
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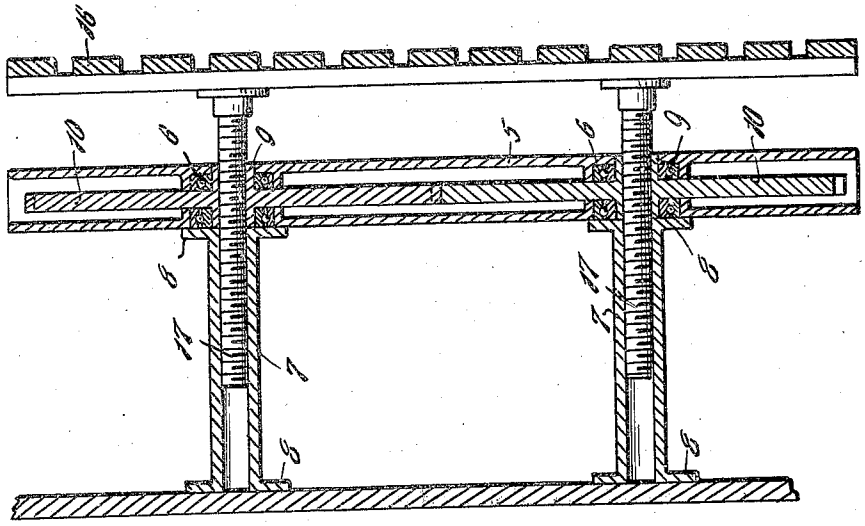
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PRESSING INSTALLATION FOR FREIGHT CARS

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UNITED STATES PATENT OFFICE

HOLMES BRYSON, OF GROVELAND, FLORIDA

PRESSING INSTALLATION FOR FREIGHT CARS

Application filed November 6, 1928. Serial No. 317,528.

This invention relates generally to improvements in freight cars, and has more particular reference to a press structure constructed for installation within one end of a freight car and adapted to be operated externally of the car whereby to tightly press crates, boxes, barrels or other containers or articles together within the car to prevent movement of the same while the car is in transit.

An important object of this invention is to provide a novel, simple, and inexpensive means constructed for ready installation within the end of any conventional freight car, and this without requiring unusual expenditure.

With the foregoing and other objects in view as the nature of the invention will be better understood, the same comprises the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawings and claimed.

In the drawings wherein like reference characters indicate corresponding parts throughout the several views:

Figure 1 is a detail longitudinal section of a freight car body fitted with my improved pressing means.

Figures 2 and 3 are detail vertical sections taken substantially upon the lines 2—2 and 3—3 of Figure 1 and looking in the direction of the arrows for more clearly disclosing the construction of the improved press mechanism.

Figure 4 is an enlarged fragmentary vertical section taken substantially upon the line 4—4 of Figure 2 for more clearly disclosing certain detail features of the press mechanism.

Figure 5 is a fragmentary outside elevation of the end wall of the car body adjacent my structure, showing the means whereby the press may be manually operated from the exterior of the car, and

Figure 6 is a perspective of one of the guide sleeves provided for the threaded stems associated with the press board per se.

Now having particular reference to the drawings, A designates generally the body of a conventional freight car. In carrying out the present invention I arranged within one end of this body and in spaced relation with the adjacent end wall and at the center of the car a vertical beam B suitably braced and secured to the car at its upper and lower ends as indicated by the reference characters C—C.

Rigidly secured to the outer side of this beam B and at its center is a substantially square shape and shallow gear frame 5 of skeleton formation consisting of closely spaced walls as clearly illustrated in Figures 1 and 4. Arranged longitudinally between these walls within the four corners thereof are bearing units 6 while extended horizontally between these bearings and the adjacent end walls of the body A are guide sleeves 7, the opposite ends thereof being flanged as at 8—8 to permit the securing of these sleeves to the end wall and to the rear wall of the gear frame 5. Journaled for rotation within these bearings 6 are the hollow internally threaded hubs 9 of large spur gears 10, all of which have mesh with each other as illustrated in Figure 2.

Arranged upon a bearing within the center of the said frame 5 is a gear 11 having mesh at opposed points with idler gears 12—12 also journaled within the frame in any suitable manner.

The gear 11 is operatively associated with an outwardly extended shaft 13 guided within a sleeve 7′ similar to the said sleeves 7, previously described. This shaft 13 projects through the adjacent end wall of the car body and is equipped at this end with a crank handle 14. Suitable means is provided upon the outer side of this end wall of the car to facilitate the locking of the crank against rotation, the locking means being designated generally by the reference character 15.

The press further includes a substantially square shaped press board 16 between the frame 5 and the remote end of the car body. This press board being equipped at its rear side with four horizontally extended threaded shafts 17, each of which is threaded through the adjacent threaded hub of the meshing gears 10, while after extending through the hubs they are supported within

said sleeves 7, see Figure 4. This press board 16 may be of any desired structure, preferably that as illustrated in the drawing. Obviously, after the car has been packed with crates, boxes, barrels, or other containers, a turning of the shaft crank 14 in one direction will cause the rotation of the gears 10 and the forward movement of the shaft 17 causing the engagement of the press board with the adjacent containers or the like within the car for maintaining them against movement while the car is in transit.

It will of course be obvious that the threads of certain of the gear hubs and the complemental threaded shafts must be right handed, while others must be left handed to cause the simultaneous movement of the shaft in reverse direction.

In view of the foregoing description when considered in conjunction with the accompanying drawings it will be apparent that I have provided a novel, simple, and useful press structure for freight cars that is well adapted for all the purposes heretofore designated, even though I have herein shown and described the invention as consisting of certain detail structural elements, it is nevertheless to be understood that minor changes may be made therein without affecting the spirit and scope of the appended claims.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:

1. In a press for box cars, a support within one end of the car, a gear frame anchored to said support, a plurality of gears within the frame, means extending through one end of the car for rotating the gears, a press board between the remote end of the car and said gear frame, and cooperating means between the press board and said gears to cause the reciprocatory movement of the board in reverse direction, during the reverse rotation of said gears

2. In a press for box cars, a support within one end of the car, a plurality of intermeshing gears mounted for rotation upon said support, said gears having central internally threaded hubs, threaded shafts arranged within the hubs, means adjacent the hubs for supporting said shafts, means arranged exteriorly of the car for rotating said gears, and a press board mounted upon the inner ends of said threaded shafts adapted to be moved into or out of engagement with the material within the car when said shafts are moved in reverse direction.

3. In a press for box cars, a support within one end of the car, a sleeve secured at opposite ends to said support and the adjacent end wall of the car, a shaft slidable and rotatable in the sleeve, a press board secured to said shaft at one end of the shaft and adapted for reciprocatory movement within the car for cooperation with the opposite end wall of the car for maintaining the contents of the car in a closely packed condition, and means operable exteriorly of the car for actuating said shaft.

In testimony whereof I affix my signature.

HOLMES BRYSON.