

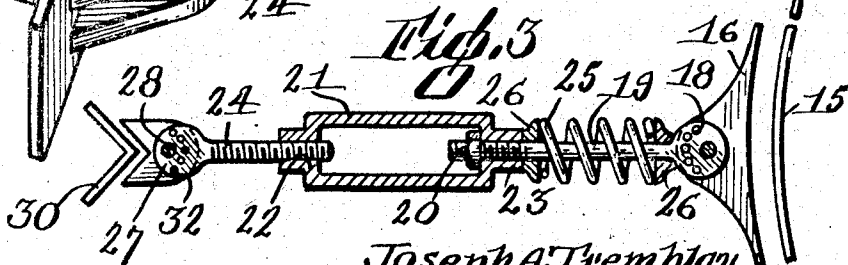
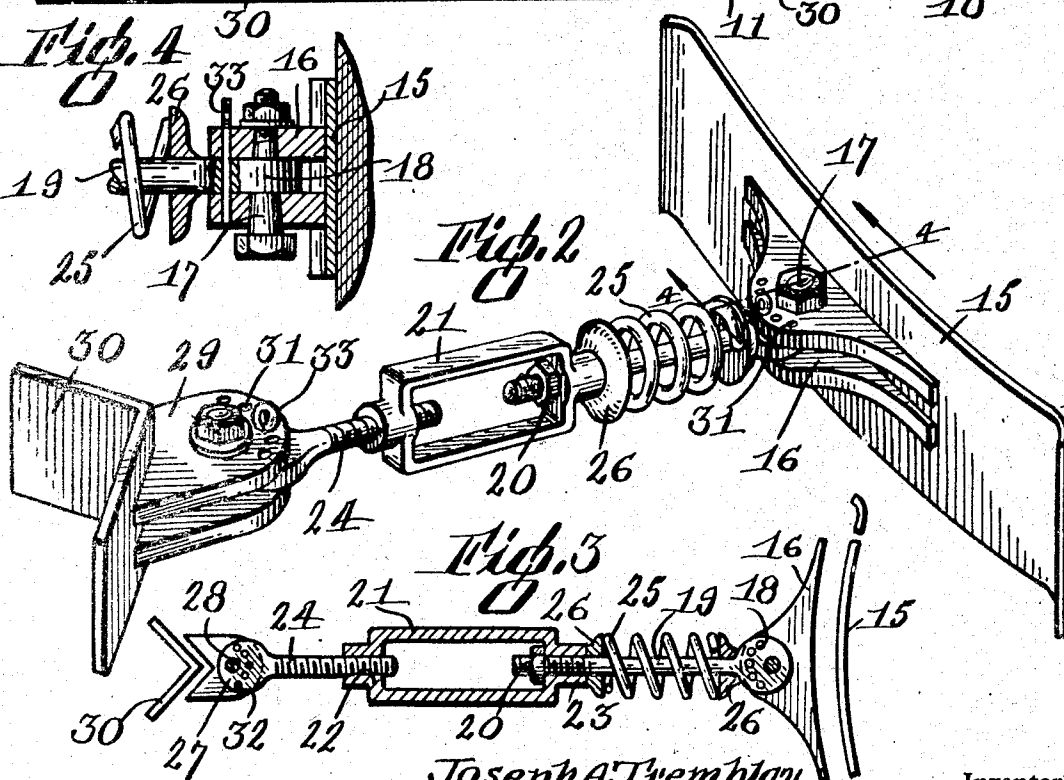
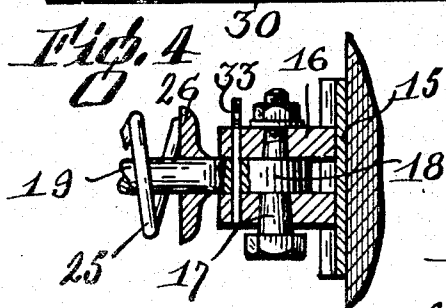
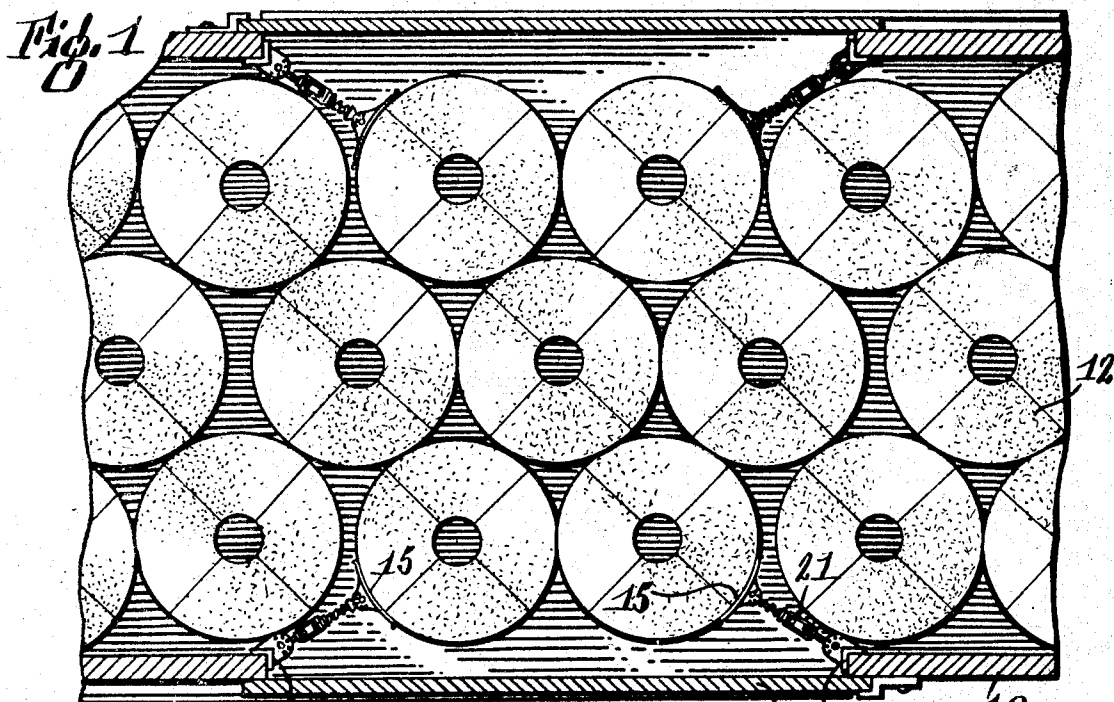
Nov. 24, 1931.

J. A. TREMBLAY ET AL

1,833,764

PACKING DEVICE

Filed Feb. 7, 1930



Joseph A. Tremblay
Joseph O. Dumoulin

Inventors

By

Maxion & Maxion

Attorneys

UNITED STATES PATENT OFFICE

JOSEPH A. TREMBLAY AND JOSEPH O. DUMOULIN, OF DOLBEAU, QUEBEC, CANADA

PACKING DEVICE

Application filed February 7, 1930. Serial No. 426,680.

The present invention relates to improvements in packing devices and has for its principal object to provide a device designed particularly for packing in a compact mass paper rolls and similar articles during transit in railroad freight cars or other vehicles.

A further object of the invention is the provision of a packing device generally in the form of a resilient longitudinally extensible jack disposed to firmly press paper rolls and the like in compact arrangement and to protect the doors of freight cars from injury by the movement of the rolls.

Another object of the invention is the provision of a packing device of the above character which will be relatively simple and durable in construction and which will be extremely effective in use.

Other objects and advantages of the invention will become apparent as the description progresses.

In the accompanying drawings forming a part of this specification and in which like reference characters are employed to designate corresponding parts throughout the same:

Figure 1 is a fragmentary top plan view illustrating the application of the packing device in compactly massing paper rolls in a freight car,

Figure 2 is a perspective view of one of the assembled packing jacks,

Figure 3 is a side elevational view, partly in section, showing several of the component elements in separated positions, and

Figure 4 is an enlarged fragmentary section taken on the line 4—4 of Figure 2.

Referring to the drawings, wherein for the purpose of illustration is shown a preferred embodiment of the invention, the numeral 10 generally designates a fragmentary section of a railroad freight car equipped with the usual side doors 11 and carrying a plurality of rolls of paper 12. As is well known to those familiar with the shipment of paper rolls, it is advisable to secure, in some manner, the rolls disposed adjacent the car doors, inasmuch as the movement of the car will result in transverse shifting of the rolls and

consequent injury to the paper and the car structure.

The packing device or jack comprising the subject matter of the present invention is devised for the purpose of resiliently engaging and retaining in a compact mass the paper rolls during transit, particularly the rolls disposed adjacent the car doors, inasmuch as these must be retained in position spaced from the doors to permit convenient opening thereof. The device embodies an article engaging head comprising an elongated plate 15 having a longitudinal arcuate curvature conforming to the peripheral curvature of a roll of paper. The outer side of the plate 15 contacts with a pair of elongated pivot bearings 16 having journaled transversely therethrough a pivot pin 17.

The pin 17 extends through an aperture in the enlarged end 18 of an outwardly extending rod 19, the opposed end portion of the rod being exteriorly screw threaded to receive thereon a nut 20.

At the intermediate portion of the device is provided a turnbuckle loop 21 provided with longitudinally extending sleeves 22 and 23 at the ends thereof. The sleeve 23 is disposed to slidably receive therethrough the threaded end portion of the rod 19, while the opposed sleeve 22 is interiorly threaded for engagement with a longitudinally extending adjusting screw 24.

Positioned about the rod 19 between the bearings 16 and the turnbuckle sleeve 23 is a coiled compression spring 25 compressed between a pair of washers 26 and tending to resiliently extend the turnbuckle from the head plate 15, the resilient extension between these members being limited by the adjustable nut 20.

The outer extremity of the adjusting screw 24 is formed with an enlarged flat head 27 provided with an aperture through which is extended a pivot pin 28 journaled in a pair of apertured complementary bearings 29. The outer ends of the bearings 29 are provided with V-shaped notches adapted to receive therein an angular bracket plate 30 disposed to be fitted against the jamb of a box car door frame.

As shown to advantage in Figures 2 and 3, the interior portions of the bearings 16 and 29 are formed with an arcuate series of apertures 31 disposed in registration with similar apertures 32 in the enlarged portions of the rod 19 and adjusting screw 24 respectively. A cotter pin 33 is extended through the complementary apertured members at each end to lock the same in a suitably adjusted position. Thus, the pivot pin bearings 16 may be adjusted and locked to extend at various angles of inclination with respect to the rod 16, while the bearings 29 may be similarly rotatably adjusted with respect to the adjusting screw 24.

In applying the packing devices or jacks to a shipment of rolls of paper transported in a box car, four of the jacks are placed with the angular plate heads 30 positioned against the jambs of the door frames, the intermediate stem forming elements being disposed at an oblique angle and the curved plate heads 15 positioned against paper rolls disposed inwardly of the car doors, as shown to advantage in Figure 1. A suitable longitudinal adjustment of the jacks is obtained by an initial adjustment of the nut 20 in each jack and by subsequently rotating the turnbuckle loop 21 so that the jacks will firmly press against the rolls to retain the same in a compact mass in the car but will be resiliently yieldable to obviate injury to the rolls. Thus, the rolls will be held in a closely packed yieldable disposition spaced from the doors of the car so as to permit convenient opening of the latter when the car reaches its place of destination. By thus bracing the rolls, both the paper and the box car structure is protected so as to reduce the injury to both during transit to a minimum.

It is to be understood that the form of our invention herein shown and described is to be taken as a preferred example of the same, and that various changes as to the shape, size, and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described our invention, we claim:

1. A device of the character described comprising an article engaging head, a rod extending transversely from the said head, a screw spaced from and arranged in longitudinal alignment with the rod, adjustable means connecting the said screw and rod, a support engaging head connected with the outer end of the adjusting screw and resilient means on the rod tending to force the heads apart.

2. A packing device comprising an article engaging head, a rod having one end disposed to contact with the said head, a turnbuckle loop having one end slidably fitted upon the said rod, a spring disposed between said turnbuckle and the outer end of the rod tending

to urge the heads outwardly, an adjusting screw threadedly connected with the opposed end of the turnbuckle, and a support engaging head associated with the outer end of the adjusting screw.

3. In a packing device, an article engaging head, a pair of pivot bearings disposed to contact with the said article engaging head, a rod having its outer end pivotally connected with the said bearings, a turnbuckle loop having a sleeve on one end slidably fitted over the outer end portion of the rod, a coiled compression spring positioned about the rod tending to force the turnbuckle loop at a remote position from the rod bearings, an adjusting screw threadedly connected with a sleeve in the opposed end of the turnbuckle loop, a pair of bearings pivotally connected with the outer end of the adjusting screw, and a support formed to engage the outer portion of the said last mentioned bearings.

4. A packing device of the character described, comprising in combination with the door frame of a railroad car, an article engaging head, a door frame engaging head, resilient means between the heads to force the same apart, and means on the door engaging head whereby the device may be oriented inside the car for the best position to economize space and articles, to be packed, disposed up to the outer edge of the car floor, between the doors of the car.

In witness whereof we have hereunto set our hands.

JOSEPH O. DUMOULIN.
JOSEPH A. TREMBLAY.