

H. G. BATES.
COMBINATION TRUNK PACKING BOARD AND CLOTHES RACK.
APPLICATION FILED NOV. 20, 1911.

1,033,045.

Patented July 16, 1912.

2 SHEETS—SHEET 1.

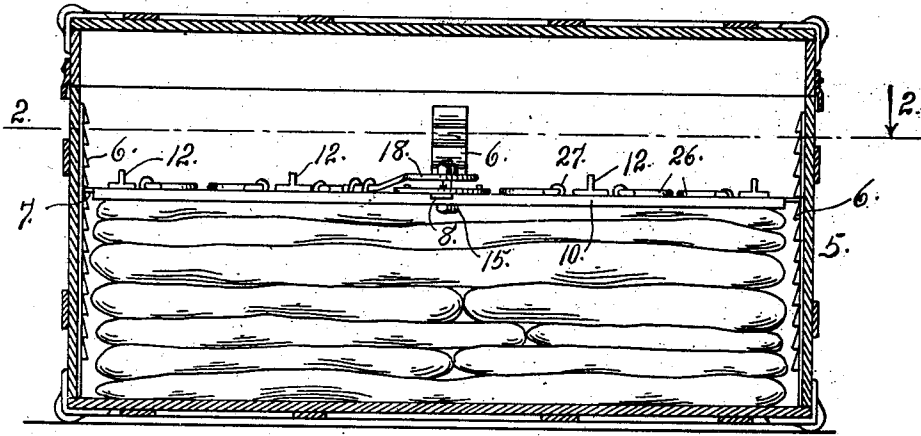


Fig. 1.

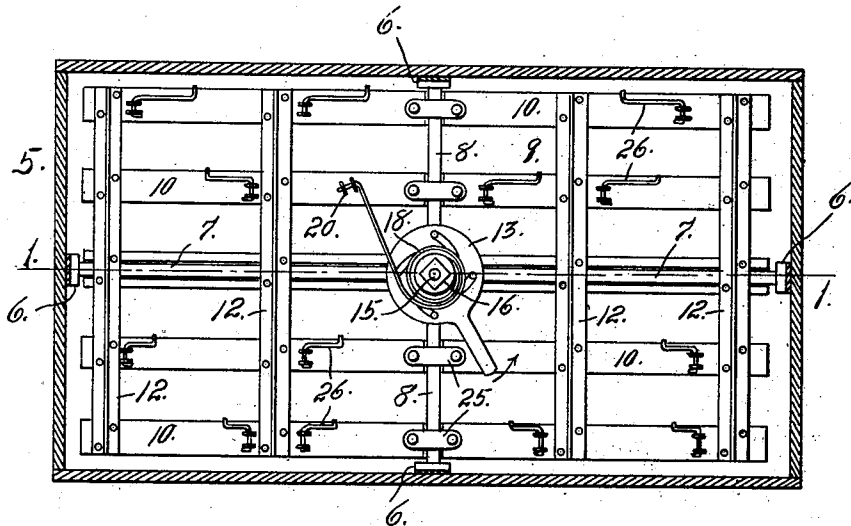


Fig. 2.

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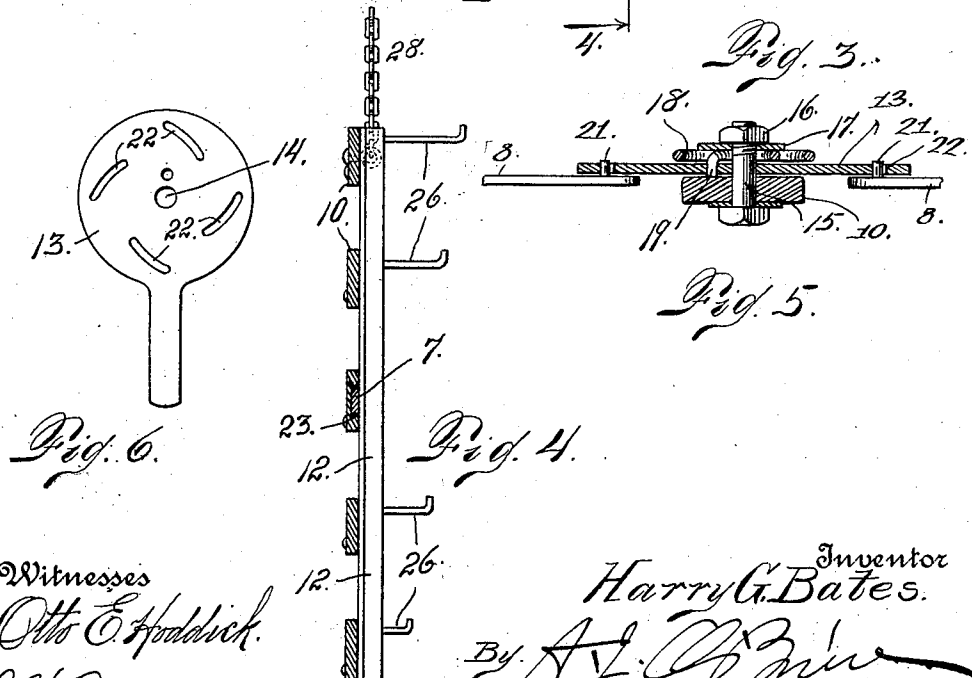
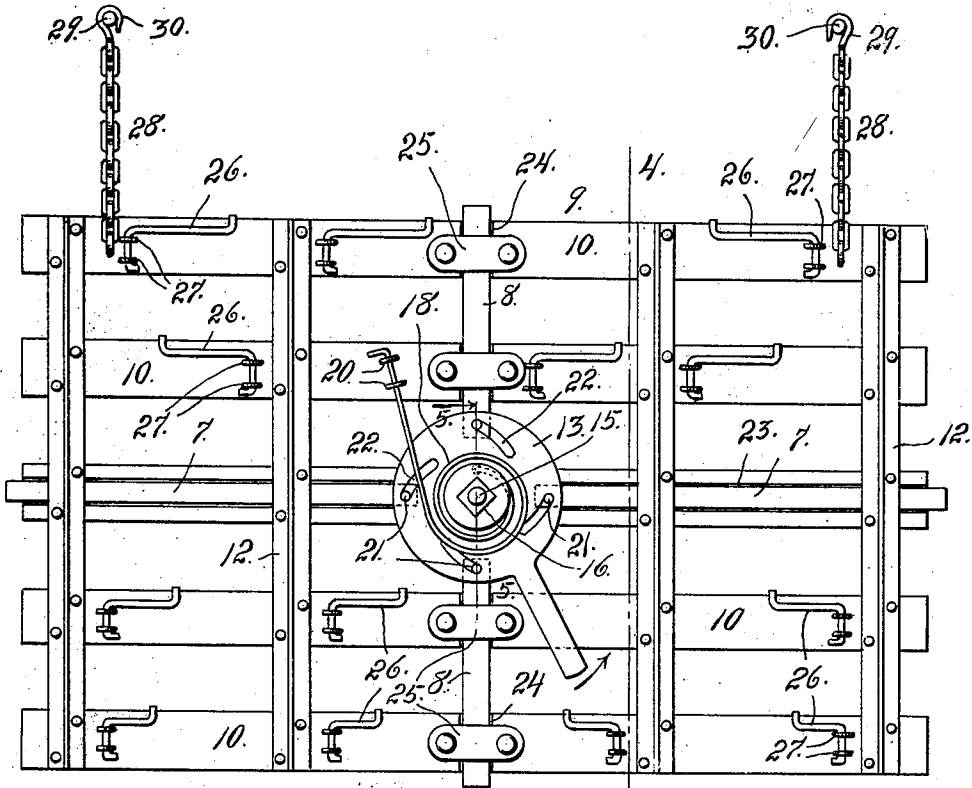
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UNITED STATES PATENT OFFICE.

HARRY G. BATES, OF RIDGEFIELD PARK, NEW JERSEY.

COMBINATION TRUNK PACKING-BOARD AND CLOTHES-RACK.

1,033,045.

Specification of Letters Patent.

Patented July 16, 1912.

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To all whom it may concern:

Be it known that I, HARRY G. BATES, a citizen of the United States, residing at Ridgefield Park, county of Bergen, and State of New Jersey, have invented certain new and useful Improvements in Combination Trunk Packing-Boards and Clothes-Racks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

My invention relates to a combination trunk packing-board and clothes-rack, being a device adapted to be employed in connection with a trunk, in which capacity it acts as a follower adapted to fill the space or horizontal sectional area of the trunk, being constructed to be pressed downwardly into the trunk against the articles to be packed, the board being equipped with spring-actuated rods adapted to engage toothed plates vertically disposed on the sides and ends of the trunk, the teeth of the said plates being arranged to allow the rods of the board to slip downwardly over the same and catch wherever the board is stopped. Provision is made by the employment of a centrally-located disk, having curved slots into which pins formed on the inner extremities of the said rods project, whereby the rods may be withdrawn from engagement with the teeth when it is desired to remove the board, the slotted disk having a projecting arm or handle giving sufficient leverage to easily move the disk against the tension of a spring, one extremity of which is connected with the disk while the other extremity is secured to the board.

When taken from the trunk, the board may be hung upon suitable hooks, nails, or other supports, which the wall contains, and, when used in this capacity, folding hooks mounted on the board are adapted to be brought into requisition, the said hooks being raised from their normally folded position against the board. This device, while advantageous in connection with all trunks, and for use by all travelers, is more especially advantageous for the use of actors and theater people whose dressing rooms are usually illly equipped with conveniences for

hanging garments by reason of the fact that the walls of these dressing rooms are often soiled or coated with kalsomine, which will readily come off on articles which are hung against the wall. This rack protects the articles from actual contact with the wall, and, at the same time, affords a convenient support for various articles of clothing by reason of its equipment with the aforesaid folding hooks.

Having briefly outlined my improved construction, I will proceed to describe the same in detail, reference being made to the accompanying drawing, in which is illustrated an embodiment thereof.

In this drawing: Figure 1 is a vertical longitudinal section taken through a trunk equipped with my improvement. This section is taken on the line 1—1 of Fig. 2, the packing-board, however, being shown in elevation. Fig. 2 is a horizontal section, taken on the line 2—2 of Fig. 1, looking downwardly, or in the direction of the arrow adjacent the said line. Fig. 3 is a detail view of the trunk packing-board shown in position as a clothes-rack, the same having been detached from the trunk and shown on a larger scale. Fig. 4 is a section taken on the line 4—4 of Fig. 3, looking toward the right. Fig. 5 is a fragmentary sectional view of the device, cutting the spring-held disk, being a section taken on the line 5—5 of Fig. 3, the parts being shown on a larger scale. Fig. 6 is a detail view of the disk for manipulating the ratchet rods of the device.

The same reference characters indicate the same parts in all the views.

Let the numeral 5 designate a trunk, whose side and end walls are respectively equipped with vertically-disposed ratchet bars or toothed plates 6, adapted to cooperate with ratchet rods or plates 7 and 8, which are slidably mounted on a packing-board or follower 9, the said board being composed of longitudinally-disposed slats 10 connected by transversely-arranged T-irons 12. In the center of this board is pivotally mounted a disk 13 having a central opening 14 through which a pivot bolt 15 is passed, the head of the bolt engaging the lower surface of the central slat 10, while a nut 16 is applied to the upper threaded extremity of the bolt, the nut being screwed upon a washer 17, which engages from above a coiled spring 18, one extremity of which is

anchored in the disk, as shown at 19, while the opposite extremity is secured to one of the slats 10 of the board, as shown at 20.

The inner extremity of each ratchet rod 7 is equipped with a pin 21, which enters a curved slot 22 formed in the disk, the curve of the slots being arranged in such a manner that, as the disk is turned against the tension of its spring, the pins, traveling in the slots, will withdraw the flat rods 7 and 8 from engagement with the teeth of the ratchet bars 6. The board may then be removed from the trunk and hung against the wall or applied to any suitable support, which will make the device available as a clothes-rack. The ratchet rods 7 and 8 are preferably formed flat. These rods are comparatively thin, while the slats 10 are preferably composed of wood, making the device relatively light, whereby it adds very little weight to the trunk. While the cross bars 12, as illustrated in the drawing, are supposed to be composed of metal, it is evident that the board may be of any suitable construction. As illustrated in the drawing, the ratchet rods 7, which are the longitudinally-arranged rods, are embedded in grooves 23 formed in the central slat or member 10 of the board, the rods being of such thickness that, when embedded in the said grooves, their upper surfaces are flush with the surface of the slat member 10.

The ratchet rods 7 are further guided from above by the T-irons 12. The ratchet rods 8, which are the two rods extending at right angles to the rods 7 and whose outer extremities engage the ratchet bars applied to the sides of the trunk, are embedded in grooves 24 formed transversely in the two members 10 on opposite sides of the corresponding central member, while short plates 25 are applied to the said members 10 above the ratchet rods 8, to hold the said rods in place, thus cooperating with the grooved members 10 to form retaining guides for the said ratchet rods.

My improved trunk packing-board is equipped with a number of hooks 26, which are hinged to the members 10 of the board, as shown at 27, whereby the hooks may be folded flat against the members 10 or raised therefrom to form hooks upon which garments of various kinds may be hung. The folding hooks 26, upon adjacent slat members 10, may be arranged in staggered relation, so that garments hung upon the hooks may not interfere with each other. The various folding hooks mounted upon the board, as heretofore explained, are preferably longest upon the slat member 10, which is uppermost when the board is hung up to be used as a clothes-rack, the corresponding hooks on the slat member 10, next below, being shorter, while the hooks upon the lower members 10 are successively shorter,

so that the hooks upon the lowermost member 10 are shortest. It will be understood that this construction will increase the utility of the device, as well as its capacity for the purpose intended.

The device, when employed as a clothes-rack, may be supported in any suitable manner. As illustrated in the drawing, two chains 28 are connected with the slat member 10, which is uppermost when the device is suspended, the opposite extremities of the chains being equipped with hooks 29 adapted to be applied to nails 30 or other suitable or similar supports. If circumstances should require, the chains 28 may be wrapped around heating or other pipes, which are exposed in dressing rooms, particularly where these rooms, as is often the case, are located in the basement of the theater building. When so wrapped around pipes, the hooks 30 are available for insertion in links of the chains below the pipes for fastening purposes.

From the foregoing description the use and operation of my improved device will be readily understood. Assuming that the trunk is equipped with the ratchet bars 6, after the articles which are to be placed in the body of the trunk are put in position, the packing-board or follower is placed thereon with its ratchet rods 7 in alinement with the respective ratchet bars 6 applied to the opposite sides and ends of the trunk, as heretofore explained. The board is then pressed downwardly upon the garments, the ratchet rods alternately moving inwardly and outwardly as they successively pass the teeth of the ratchet bars.

Having thus described my invention, what I claim is:—

1. A packing board whose upper surface has a centrally located plate pivotally mounted thereon, ratchet rods slidably mounted on the board and whose inner extremities are equipped with pins entering slots formed in the said plate and so arranged that when the plate is turned in the proper direction, the rods are drawn inwardly toward the center of the board, and a spring lying flat upon the plate and connected therewith at one extremity and with the board at the opposite extremity, the said spring being coiled around the center of the plate and serving to hold the plate in such position that the pins of the rods engage the outer extremities of the slots, whereby the rods are normally projected outwardly to their limit of movement, for the purpose set forth.

2. The combination with a trunk equipped with ratchet bars applied to the inner surface of the walls thereof, a packing board whose upper surface is equipped with rods, a plate pivotally mounted on the board and having eccentric slots, the inner extremities

of the rods being equipped with pins entering said slots, the outer extremities of the rods engaging the ratchet bars, and a spring for actuating the rods, said spring being coiled around the center of the plate and having one extremity connected therewith, while the other extremity is attached to the board, for the purpose set forth.

3. The combination with a trunk equipped with ratchet bars applied to the inner surface of the walls thereof, a packing board equipped with rods, the said packing board being grooved to receive the rods, whereby the top surfaces of the latter are flush with the corresponding surface of the board, a plate pivotally mounted on the board and having eccentric slots, the inner extremities of the rods being equipped with pins entering said slots, the outer extremities of the rods engaging the ratchet bars, and a spring for actuating the rods, said spring being coiled around the center of the plate and having one extremity connected therewith, while the other extremity is attached to the board, for the purpose set forth.

4. The combination with a trunk, or packing case, of ratchet bars vertically disposed upon the interior of the opposite side and end walls of the same, and a packing board adapted to enter the said trunk and equipped with ratchet rods whose outer extremities are adapted to engage the said ratchet bars of the trunk and whose inner extremities are provided with pins, a plate centrally located and pivotally mounted on the packing board, and having slots into which the pins project, said slots being

curved to cause the pins to move toward the center of motion as the plate is moved in a given direction, and a spring connected with the said plate for normally holding the plate in position to cause the pins to engage the outer extremities of the slots, the pivoted plate having a handle projecting laterally from the center of motion to facilitate its manipulation in opposition to the spring for the purpose of moving the ratchet rods inwardly toward the center of the board, substantially as described.

5. A device of the class described, comprising a board composed of longitudinally and transversely disposed members, means for suspending the board by connecting the same with suitable supporting device, folding hooks mounted upon the longitudinally disposed members, the said hooks diminishing in length from the upper member of the board, downwardly, for the purpose set forth.

6. A device of the class described, consisting of a board composed of longitudinally disposed members, having flexible suspension means applied to one edge thereof, and folding hooks applied in staggered relation to the said members and diminishing in length from the upper member of the board downwardly when the latter is suspended, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY G. BATES.

Witnesses:

F. E. BOWEN,

A. EBERT O'BRIEN.