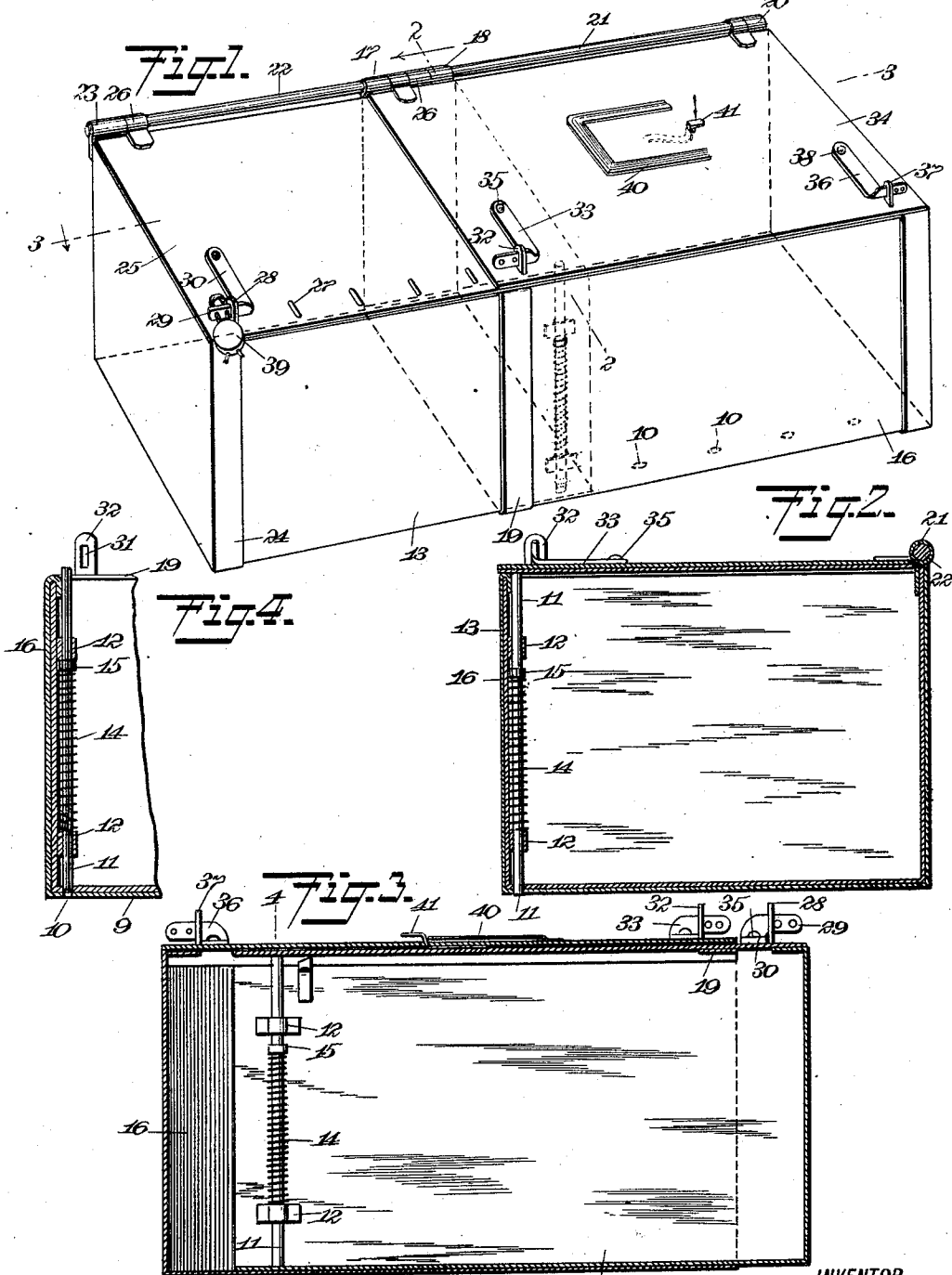


E. S. SHEPHERD.
COLLAPSIBLE PACKING CASE.
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WITNESSES:
Edward S. Shepherd
Edmund

INVENTOR
Edward S. Shepherd
BY *Mumford*
ATTORNEYS

UNITED STATES PATENT OFFICE.

EDWARD S. SHEPHERD, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO WILLIAM W. MACHEMER, OF BROOKLYN, NEW YORK.

COLLAPSIBLE PACKING-CASE.

1,000,955.

Specification of Letters Patent. Patented Aug. 15, 1911.

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To all whom it may concern:

Be it known that I, EDWARD S. SHEPHERD, a citizen of the United States, and a resident of the city of New York, Canarsie, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Collapsible Packing-Case, of which the following is a full, clear, and exact description.

Among the principal objects which the present invention has in view are: to provide a carton or case for trans-shipment of merchandise which may be adjusted to size to meet the emergencies of shipments and to economize the cost of handling by reducing the bulk dimensions of the returned or empty case; to provide a structure for boxes or cases of the character mentioned which is more durable than the form at present provided; and to provide means for locking the case which automatically locks or fixes the size of the same.

One embodiment of the present invention is disclosed in the structure illustrated in the accompanying drawings, in which like characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a perspective view of a packing case constructed and arranged in accordance with the present invention; Fig. 2 is a vertical cross section taken on the line 2—2 in Fig. 1; Fig. 3 is a longitudinal section taken on the line 3—3 in Fig. 1; and Fig. 4 is a detail view in vertical section taken on the line 4—4 in Fig. 3.

The packing case shown in the accompanying drawings is formed in two box sections, one of said sections being of relatively contracted size, adapted to slide within the other of said sections. The sections are preferably constructed from sheet metal as forming a wearing material of greater endurance than wood. It is, however, not essential to the construction that this material should be used, it being practical to form the same of wood. Each of the sections is provided with a bottom, three vertical sides, and a hinged door. The bottom 9 of the large section is provided with a series of perforations 10. The perforations 10 are provided to receive a bolt 11. The bolt 11 is mounted in guides 12 fixedly secured on the front side 13 of the smaller of the said box sections. The bolt 11 is normally supported upon a spring 14. To rest

on the spring 14 it is provided with a collar 15 which limits the upward lift of the said bolt by impinging upon and under the upper guide 12. In its lifted position the bolt 11, as shown best in Fig. 4 of the drawings, is at the upper end raised above the edge of the front side 16 of the larger box section. It will also be noticed that the lower end of the bolt is lifted above the perforations 10 in the bottom 9. In this position the two box sections may be moved together or separated as far as the guide loops 17 and 18 permit. The guide loop 17 is mounted on a reinforcing strap 19, while the guide loop 18 is mounted on the end of the side 13. Fixedly mounted within the loop 17 and a loop 20 on the larger box section, is a tube 21. The tube 21 serves as a guide for the rod 22, which rod is fixedly mounted on the looped end 23 of a reinforcing strap 24. The loop 18 formed on the end of the smaller box section infolds the tube 21 in sliding relation therewith. The loop 18 and rod 22 thus serve as guiding members for the smaller box section in its movement within the larger box section, while the bolt 11, when engaged with any one of the perforations 10 and held in engagement therewith, constitutes the member for limiting the movement of the two box sections or serves as a lock for the two sections.

The door 25 covering the smaller box section is provided with hinge wings 26. The wings 26 are juxtaposed to the loops 18 and 23, the said loops serving to hold the door in alined position. The door 25 is provided adjacent the opening edge thereof with slots 27, one of which is disposed to pass the hasp 28 so that the shackle end 29 of the latch 30 may pass through a slot 31 formed in the hasp 28. The hasp 28, it will be understood, is mounted upon and forms a part of the structure of the smaller box section. A hasp 32 is mounted upon the larger box section, and is raised above the reinforcing strap 19 where the same passes across the top of the said larger box section, as best seen in Fig. 3 of the drawings. The hasp 32, like the hasp 28, is provided with a slot 31 to receive the latch 33. The hasp 32 is disposed to pass through any of the slots 27. It also passes through a slot provided near the edge of the door 34 of the larger box section adjacent the smaller box section. The hasp 32, when

both doors are closed, extends through slots in both the said doors, and is engaged by the latch 33 which is pivoted at 35 upon the door 34. The latches 33 and 36 constitute the locks for the door 34, the latch 36 being extended through a hasp 37, as best seen in Fig. 1 of the drawings. The latch 36 is pivotally mounted upon the door 34 at 38. Any suitable form of pivots is used in securing the latches 30, 33 and 36.

With a packing case thus constructed the operation is as follows: The doors 25 and 34 being raised the bolt 11 is raised to the position shown in Fig. 4 of the drawings. The case is then packed. The smaller box section is gradually withdrawn as the needs for room demand. When the case is finally packed it will be found on lowering the door 25 that one of the slots 27 aligns with the hasp 32 or is approximated thereto. If the nature of the contents of the case permits, the smaller box section is now forced against the contents of the case to compress the same more firmly to permit the registering of the slot 27 with the outer side of the hasp 32. If the character of the contents will not permit being so crowded the smaller box section is drawn outward until the slot 27 adjacent registers with the hasp 32. When the hasp and slot register the door 25 may be depressed against the top of the bolt 11, which bolt is by this action forced downward into one of the perforations 10. It will be understood, with reference to the hasp 32, that the slots 27 and perforations 10 are equally spaced, so that with the registration of each of the slots 27 with the hasp 32 there is a registration of the bolt 11 with a perforation 10. The door 25 being lowered is secured by the latch 30 being turned on its pivot to insert the shackle end 29 through the slot 31 in the hasp 28. The door 34 is then dropped into closed position, overlapping the door 25 as much as the side 16 overlaps the side 13. The slots in the door 34 always register with the hasps 32 and 37. When the door 34 is pressed down the latches 33 and 36 are engaged with the hasps 32 and 37 in the manner above described. It will be observed that in this position it is impossible to lift the door 25, the same being held firmly in position by the securement of the door 34.

The shackles of the latches 30, 33 and 36 are provided with perforated ends to receive holding wires or lead seals 39. The lead seals 39 are of usual construction and are employed to fasten the case in the manner substantially as shown in Fig. 1 of the drawings.

To receive a name plate or shipping card a raised pocket frame 40 is provided, the construction of which is of any suitable form. Extended through the door 34 adjacent the open end of the frame 40 is a

spring latch 41, which, when lifted to its normal position, as shown in Fig. 1 of the drawings, prevents the withdrawal of the plate or card held in the frame 40. To withdraw the plate or card the head of the latch 41 is depressed, the resiliency of the body of the said latch permitting this action.

It will be understood that the case may be formed to a size suited to the shipment desired. It is obvious that when a case is shipped extended to its full capacity, as shown in Fig. 1 of the drawings, the same case may be returned empty, the sections being collapsed to the contracted position shown in Fig. 3 of the drawings. Thus, on the return of the packing case considerable cost in freight or expressage will be effected, it being understood that the charge for carriage of articles of this nature is governed by bulk rather than by weight.

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

1. A collapsible packing case, comprising a plurality of open-ended box sections the one slidably mounted within the other, one of said sections having a plurality of perforations; a bolt slidably mounted on the other of said sections to extend into said perforations; means for normally raising said bolt out of said perforations; closure members for said sections to rest upon said bolt to force the same into one of said perforations when said members are in closed position; and means for locking said members in closed position.

2. A collapsible packing case, comprising a plurality of open-ended box sections the one slidably mounted within the other, one of said sections having a plurality of perforations; a bolt slidably mounted on the other of said sections and to extend into said perforations; a spring to normally raise said bolt above the upper edge of said sections; hinged tops for said sections to move said bolt into said perforations in said section when said tops are closed; and means for locking said tops in closed position.

3. A collapsible packing case, comprising a plurality of open-ended box sections the one slidably mounted within the other, one of said sections having a plurality of perforations; a bolt slidably mounted on the other of said sections and to extend into said perforations in the other of said sections; a spring to normally raise said bolt above the upper edge of said sections and out of engagement with certain of said perforations; a plurality of closure doors arranged upon said sections, one of said doors to strike upon and depress said bolt to move the same within said perforations to hold in fixed relation said sections; and means for locking said doors in closed position.

4. A collapsible packing case, comprising a plurality of open-ended box sections the one slidably mounted within the other, one of said sections having a plurality of perforations; a bolt slidably mounted on the other of said sections to engage said perforations; a spring to normally raise said bolt above the upper edge of said sections; a plurality of closure doors one mounted upon each of said sections, one of said doors to strike upon and depress said bolt within said perforations to hold the said sections in fixed relation, one of said doors provided with a series of slots adjacent the edge thereof, said slots spaced apart to correspond with the spacing of said perforations; a hasp mounted upon one of said sections, for insertion through said slots; and a locking member having a shank for engaging said hasp.

5. A collapsible packing case, comprising a plurality of open-ended telescopically disposed box sections, the larger of said sections being provided with a series of per-

forations adjacent the front edge of said section; a bolt slidably mounted upon the smaller of said sections to register with the said perforations and to extend above the upper edge thereof; means for normally raising said bolt above the upper edge of said smaller section; a door hinged to the smaller of said sections adapted to impinge upon said bolt to force the same into said perforations, said door being provided with a plurality of slots separated to conform with the separation of said perforations; means for locking said door in closed position; a closure member for the larger of said sections to rest over the door of said smaller section; and means for locking said closure member.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD S. SHEPHERD.

Witnesses:

E. F. MURDOCK,

PHILIP D. ROLLHAUS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."