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SHIPPING CARTON

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# UNITED STATES PATENT OFFICE

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2 Claims. (Cl. 229–23)

The invention relates to improvements in shipping cartons constructed of fibre or corrugated board, but more particularly to cartons of this kind which are provided with reinforcing members adapted to be arranged within the carton to 5 reinforce the walls for added protection to the article shipped therein. The invention has for its objects the provision of such an arrangement which will be economical to manufacture, convenient to assemble and highly efficient in use. 10

Other objects will appear hereinafter.

The invention consists of the combinations and arrangements of parts hereinafter described and claimed. The invention will be best understood by reference to the accompanying drawings form- 15 ing a part of this specification, and in which

Figure 1 is a perspective view of a fragmentary part of such a carton embodying the invention as arranged for use;

arranged on their edges and nailed together in rectangular form, as best shown in Figure 2. The notched corners of the plate members 32-32 and 34-34, when assembled as shown, are adapted to engage the upper ends of the four corner posts 26, holding the said posts 26 at their tops tightly in the corners of the carton. The top of the capping frame 31 is substantially at the top of the wall 16. It is to be noted that corner posts 26 are held at their bottom by the base 18 and at their top by the capping frame 31, thus affording reinforcing means at a very vulnerable point in such cartons.

The capping frame 31 is further provided with a bar 36, centered between the plates 32-32, having projecting tongues 38 at each end adapted to fit in notches 40-40 of the plate members 34-34. By this arrangement the top of the carton is reinforced when closed, as will be read-Two center posts 28-28 are arranged against opposite panels of the wall 14 in vertical position with their bottoms resting on the sills 20-20, and their inner bottom faces resting against the outer edge of the slat 24. The upper end of the center posts 28 are each provided with an upwardly projecting tongue 30 on the outer side thereof, forming an outwardly and upwardly projecting lap resting against the outer face of the plates 34-34. The lower edges of both plates 34-34 are provided with notches 42-42 adapted to rest on the shoulder 44-44 of the posts 28-28. When the closure panels are in closed position the bar 36 and the posts 28 form a reinforcing means permitting a steel strapping to be placed around the center of the closed carton, as will be readily understood. In the boxing of some articles, particularly those of a general cabinet form, it is advisable to invert the article and to affix a base to its bottom for protection in trucking or moving, and to slip the carton over the base and the article. The whole assembly is then set upright, the corner posts inserted in each corner. If the article 45 happens to have a domed shape top, suitable packing material is inserted and the capping frame 31 installed on the corner posts 26 and the center posts 28. The carton is then ready for closure in the usual manner. It is respectfully contended that the specific form of the combinations and arrangements of parts herein shown and described is a simple and effective one for the purpose, quite capable of many modifications and equivalent construction without departing from the spirit of the inven-

Figure 2 is an exploded view in diagrammatic 20 ily understood. arrangement of parts; and

Figure 3 is a section taken on line 3—3 of Figure 1.

The embodiment of the invention illustrated in the drawings comprises a rectangular carton 25 12 of conventional construction, having a bottom 14, a rectangular perimeter wall 15 and two pairs of closure panels foldably arranged at the top of the wall 16 (one of each pair not shown).

The reinforcing structure is constructed of 30 wood and comprises an assembled base 18 having two sills 20-20 arranged and adapted to rest on opposite sides of the bottom 14 against the opposite panels of the wall 16. Two pairs of supporting slats 22-22 and 24-24 are successively 35 arranged in superimposed relation with their ends extending to different panels of the side wall 16. Each of the slats 22-22 and 24-24 is arranged in parallel relation with its twin and with its adjacent wall. By this arrangement of  $_{40}$ parts and the fastening by suitably nailing the slats 20, 22 and 24 at their points of overlapping, a substantially horizontal base is formed which is provided at its four corners with means for entertaining a square corner post 26. The corner posts 26 are set on end on the base 20 and extend upwardly to a level below the top of the wall 16. The inner bottom faces of the corner post 26 rest against the outwardly lower corner edges of the slats 22 and 24, as will be 50readily understood. A capping frame 31 resting on top of the post 26 comprises two pairs of oppositely arranged plate members 32-32 and 34-34 having notches at each of their outwardly lower corners, are 55

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tion. I therefore desire not to be limited by the precise details set forth but to avail myself of such changes and modifications as may fall within the scope of the appended claims.

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I claim:

1. In combination with a rectangular carton of conventional construction having a bottom, a rectangular perimeter wall; a plurality of closure panels foldably arranged at the top of said wall; two base sill members arranged and sup- 10 ported on opposite sides of said bottom against opposite panels of said wall; a post arranged vertically at each corner of said rectangular perimeter wall supported at and on each end of said base sill members; a pair of slats mounted on 15 each of said base sill members in spaced and parallel relation with opposite side panels and with each other, each slat in contactual alignment with two of said posts; a topmost pair of slats mounted in spaced and parallel alignment 20 with each other, and with the other opposite panels of said perimeter wall, each of said topmost slats in contactual alignment with two of said posts at right angles and above said first contactual alignment with said posts; a rectan- 25 gular capping frame coextensive within said per-

imeter wall supported on the upper ends of said posts; and means for confining each corner post to its respective place.

2. The construction specified in claim 1 in 5 which the rectangular capping frame is provided with an elongated bar mounted centrally at the uppermost edge thereof with its ends in engagement with said frame.

### JOHN C. STETSON.

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