May 7, 1957 P. F. BOEYE 2,791,322

OUTBOARD MOTOR PACKAGE

Filed Feb. 23, 1954 2 Sheets-Sheet 1

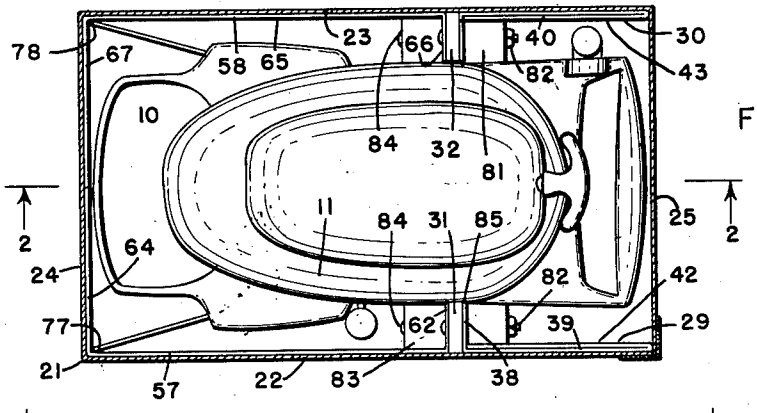


FIG. 1

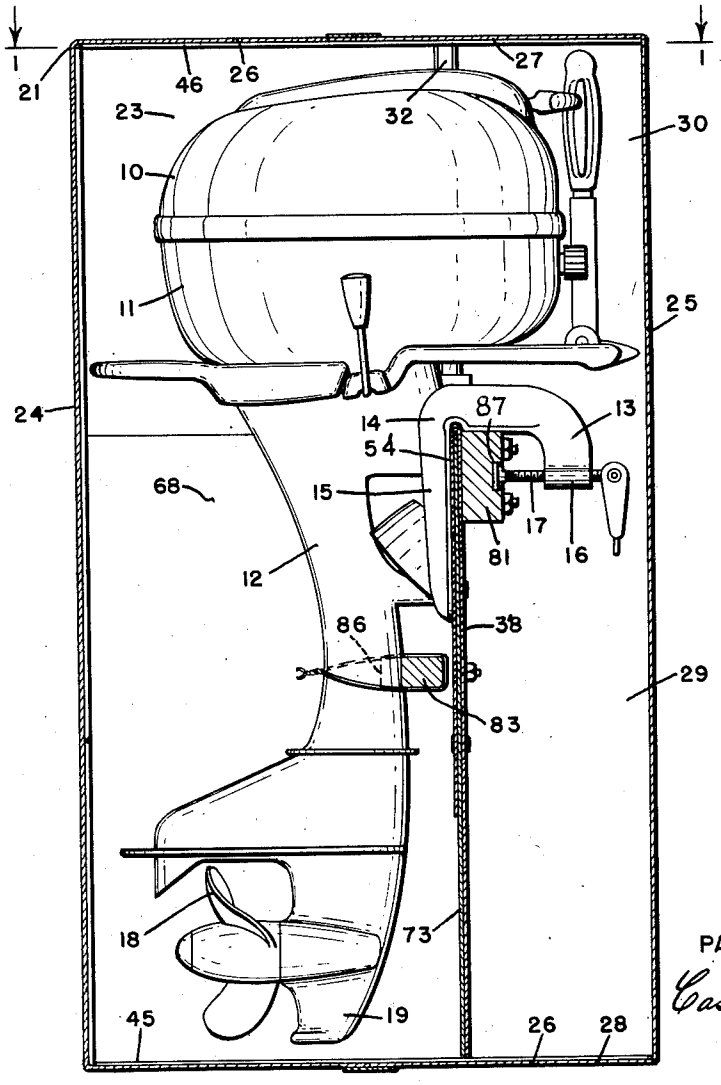


FIG. 2

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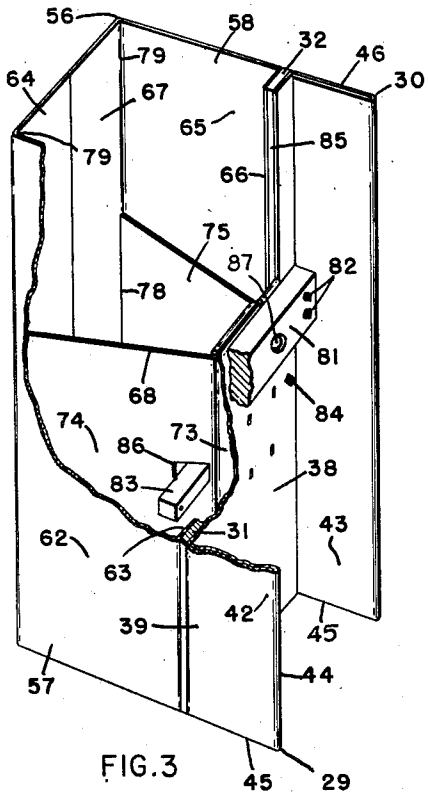


FIG. 3

FIG. 4

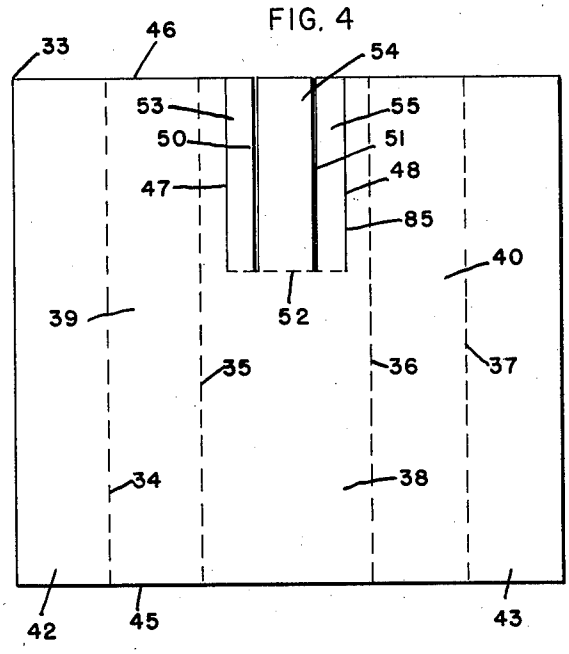


FIG. 5

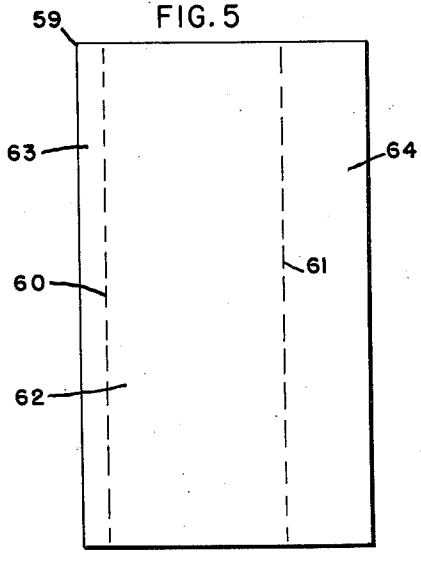
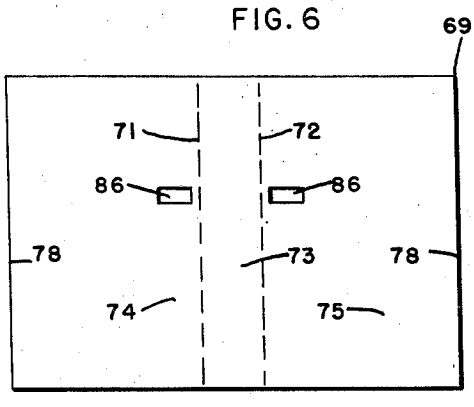


FIG. 6



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OUTBOARD MOTOR PACKAGE

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4 Claims. (Cl. 206—46)

The herein disclosed invention relates to outboard motor packages and particularly to a package in which an outboard motor may be safely shipped.

An object of the invention resides in providing a package utilizing a rectangular box having a top, bottom, a front, back and sides and in further utilizing an insert adapted to be placed within said box and supporting the motor.

A still further object of the invention resides in constructing the insert with two spaced posts extending from the top to the bottom of the box and lying along the sides of the box and in employing a cros bar attached to said posts and supporting the motor.

An object of the invention resides in providing retaining means consisting of a forward wall structure and a rearward wall structure attached to said posts and cross bar and engaging the sides, front, back, top and bottom of the box and retaining the insert in position.

Another object of the invention resides in constructing the forward wall structure with a partition overlying the posts and secured thereto and in providing side wall sections issuing from said partition and extending along the sides of the box.

A feature of the invention resides in constructing the side wall sections with flanges overlying said side wall sections and engaged by the ends of the cross bar to hold the same in position.

An object of the invention resides in constructing the rearward wall structure in two parts each having a side wall section with innermost and outermost flanges issuing from the ends of the same, the innermost flanges being attached to said posts and the outermost flanges overlying and engaging the back of the box.

Another object of the invention resides in providing a brace structure for the insert including an intermediate wall overlying the partition of the forward wall structure and secured thereto and in providing diagonal walls issuing from the intermediate wall and extending up to and received in the corners formed between the outermost flanges and the side wall sections of the parts of the rearward wall structure.

A feature of the invention resides in constructing the partition with an opening through which a portion of the motor extends and in providing a flap extending downwardly from the portion of the partition at the lowermost portion of said opening and overlying and secured to the intermediate wall of the brace structure.

Other objects of the invention reside in the novel combination and arrangement of parts and in the details of construction hereinafter illustrated and/or described.

In the drawings:

Fig. 1 is a plan sectional view of a package illustrating an embodiment of the invention taken on line 1—1 of Fig. 2.

Fig. 2 is an elevational sectional view of the subject matter illustrated in Fig. 1 and taken on line 2—2 of Fig. 1.

Fig. 3 is a perspective view of the insert of the invention removed from the box.

Fig. 4 is a developed view of the blank from which the forward wall structure of the insert is constructed.

Fig. 5 is a developed view of the blank from which one of the parts of the rearward wall structure is constructed.

Fig. 6 is a developed view of the blank from which the brace structure is constructed.

The construction shown in the drawings consists of a rectangular box of ordinary construction formed from a single sheet of corrugated board and provided with sides, a front and a back. Flaps issuing from the ends of the sides, front and back form a bottom and a top to the box and by means of which access to the interior of the box may be had. Within the interior of the box is disposed an insert comprising two posts which lie along the sides of the box and extend from the top to the bottom thereof. These posts have secured to them a forward wall structure consisting of a partition attached to the posts and side wall sections issuing therefrom and lying along the sides and engaging the front of the box. Overlying the partition is a cross bar which is secured to the posts and to the partition and which supports the motor. Mounted on the other side of the posts is a rearward wall structure consisting of side wall sections overlying the side walls of the box and flanges issuing therefrom and attached to the posts. Other flanges issuing from these side wall sections overlie the back of the box. Within the portion of the insert formed by the rearward wall structure is a brace structure consisting of an intermediate wall attached to the partition and diagonal walls issuing therefrom and having their ends received in the corners formed by the side wall sections of the rearward wall structure and the flanges issuing therefrom and overlying the back of the box.

The invention is particularly adapted to support an outboard motor of conventional form and for the purpose of illustrating the invention such a motor has been shown in Figs. 1 and 2 and is designated by the reference numeral 10. This motor comprises a housing 11 in which the engine is disposed. Issuing from this housing is a crank shaft case 12 and to which is attached the usual clamp 13. The clamp 13 consists of a U-shaped frame 14 having a rearward leg 15 and a forward leg 16. The leg 15 is pivotally connected to the case 12 so that the motor will turn. Threaded in the leg 16 is a screw 17 and by means of which the clamp may be clamped upon the transom of the boat on which it is to be used. The lower end of the case 12 supports the propeller 18 and the fin or rudder 19. Inasmuch as the construction of the motor forms no particular feature of the instant invention, the same has not been described in detail, though it can readily be comprehended that the invention can be utilized with motors such as are now well known in the art and readily available on the market.

The invention utilizes a box 21 which is constructed from a sheet of corrugated board and which is cut and scored to form sections which provide sides 22 and 23, a back 24 and a front 25. Issuing outwardly from the said sides, back and front at the upper and lower ends of the same are flaps 26 which, when folded over and secured together, form a top 27 and a bottom 28 for the box.

Mounted within the box 21 is an insert 30 best shown in Fig. 3. This insert consists of two wooden posts 31 and 32 which lie along the walls 22 and 23 of the box and which extend from the bottom 28 to the top 27 of the box. Attached to these posts is a forward wall structure 29 which is constructed from corrugated board, the same as the box 21. The blank from which the said wall structure is formed is shown in Fig. 4 and is indicated by the reference numeral 33. This blank is provided with four longitudinal scores 34, 35, 36 and 37

which, when the blank is folded along the same, form in the blank a partition 38 at the center of the said wall structure and side wall sections 39 and 40 issuing therefrom. In addition, flanges 42 and 43 are provided which issue from the side wall sections 39 and 40. The partition 38 is of a width equal to the width of the box upon the interior thereof. The marginal portions of said partition are secured to the posts 31 and 32 by gluing, stapling or otherwise to rigidly secure the parts together. The side wall sections 39 and 40 overlie the sides 22 and 23 of the box, as shown in Fig. 1, and the flanges 42 and 43 are folded back upon the scores 34 and 37 to cause said flanges to overlie said side wall sections and to stiffen and reinforce the same. The edges 44 of the side wall sections 39 and 40 engage the front 25 of the box while the ends 45 and 46 of the said side wall sections and flanges engage the top 27 and bottom 28 of the box.

In the partition 38 are formed two kerfs 47 and 48 and inwardly of these kerfs are two slots 50 and 51. These kerfs and slots extend through the upper end 46 of the blank and downwardly in parallel relation to the scores 34, 35, 36 and 37. These kerfs and slots terminate at a transverse score 52 and together with said score divide the severed portion of the partition into flaps 53, 54 and 55, the purpose of which will be presently explained in detail. When the flaps 53, 54 and 55 are folded inwardly, an opening 85 is formed in the upper portion of the partition 38 and through which a portion of the housing 11 of the motor 10 may extend when the same is mounted in the insert.

On the rearward side of the posts 31 and 32 is disposed a rearward wall structure 56 which consists of two parts 57 and 58. Both of these parts are identical and only the part 57 will be described in detail. The blank 59 from which this part is constructed is shown in Fig. 5 and is of a height equal to the height of the box. This blank is formed with two vertical scores 60 and 61 which divide the blank into a side wall section 62, an innermost flange 73 and an outermost flange 64. When the blank is bent along the scores 60 and 61, as shown in Fig. 3, the flanges 63 and 64 issue inwardly from the wall section 62 and at right angles thereto. The flange 63 is attached to the post 31 in such a manner that the wall section 62 lies in the plane of the wall section 39 of the forward wall structure 33 and overlies the side 22 of the box. The flange 64, when the insert is installed, overlies the back 24 of the box 21 and extends up to the center of the same. The part 58 is similarly constructed with a side wall section 65 and flanges 66 and 67. The flange 66 is in like manner attached to the post 32 while the flange 67 overlies the back 24 of the box and engages the edge of the flange 64.

For stiffening the rearward portion of the insert, a brace structure 68 is employed which is constructed from a blank 69 illustrated in Fig. 6. This blank is of a height equal substantially to the distance between the score 51 and the lower end 45 of the blank 33. The said blank is formed with two longitudinal scores 71 and 72 which divide the blank into an intermediate wall 73 and diagonal walls 74 and 75. The wall 73 is adapted to overlie the partition 38 of the wall structure 29 at the central portion of the same and is glued and stitched thereto. The said intermediate wall is of a width substantially equal to the width of the flap 54. The flaps 53, 54 and 55 are adapted to be folded down along the score 51, the flaps 53 and 55 being secured to the partition 38 and the flap 54 overlying and being secured to the intermediate wall 73. The diagonal walls 74 and 75 are of such length that the lateral edges 78 of the same engage in the corners 79 formed between the side wall section 62 and the flange 64 of the part 57 and formed between the side wall section 65 and the flange 67 of the part 58 of the rear wall structure. These diagonal walls stiffen and reinforce the entire insert to prevent twisting of the same and so hold the motor firmly in place within the box.

Overlying the partition 38 at the locality of the score 51 of wall structure 29 is a cross bar 81 constructed of wood. This cross bar is bolted to the posts 31 and 33 by means of bolts 82 which extend completely through said cross bar and posts. This cross bar serves as a support on which the clamp 13 of the motor 10 may be clamped as shown in Fig. 2. In said cross bar are formed two sockets 87 which receive the ends of screws 17 of said clamp and which prevent movement of the motor in the plane of said cross bar. In addition to the cross bar 81, a spacer 83 is employed which is also constructed of wood and which extends across the posts 31 and 32 and is disposed on the opposite side thereof from the cross bar 81. This spacer is disposed somewhat below the cross bar 81 and is attached to the posts 31 and 32 by means of bolts 84. The spacer 83 extends through openings 86 formed in the diagonal walls 74 and 75 of the brace structure 68. This spacer engages the case 12 of the motor and holds the same in proper spaced relation from the various walls of the insert and box.

The method of using the invention is as follows: When the package is in disuse, the box 21 is collapsed in the usual manner. Similarly the insert 30 is collapsed by removing the cross bar 81 and the spacer 83. The side wall sections and the flanges of the rearward and forward wall structures may then be folded into parallel planes. Also the diagonal walls 74 and 75 of the brace structure 68 may be folded into overlying position upon the side wall sections 62 and 63 of the rear wall structure 56. When the package is desired for use, cross bar 81 is first bolted to the posts 31 and 32. The flanges 42 and 43 are next folded over and the side wall sections 39 and 40 folded outwardly into the positions shown in Fig. 3 bringing the flanges 42 and 43 adjacent the ends of the cross bar 81. The diagonal walls 74 and 75 of the brace structure 68 are now folded outwardly into extended position and the spacer 83 inserted through the openings 86 in the same. This spacer may now also be bolted to the posts 31 and 32. The insert is then self-supporting and rests firmly upon the floor. The motor may now be inserted into the space between the diagonal walls 74 and 75 of the brace structure 68 and the clamp 13 of the motor applied to the cross bar 81. The case 12 of the motor in such position will rest against the spacer 83 and may be wired to the same. The side wall sections 62 and 65 are next folded into the plane of the side wall sections 39 and 40 and the flanges 64 and 67 brought into coplanar relation. The box 21 may now be inverted over the insert and slid in position until the open end of the same reaches the lower end of the insert. The entire package may then be inverted and the flaps 26 forming the bottom 28 glued together. Upon again inverting the package, the parts will assume the position shown in Figs. 1 and 2.

The advantages of the invention are manifest. The insert is extremely rigid and not only supports the motor in proper position but gives rigidity to the box itself so that a conventional box may be used for the packaging of the motor. The insert is easily and quickly erected and the motor is easily and quickly applied to the insert. When the motor is in proper position, all parts of the same are spaced from the walls of the insert and box so that injury to the motor is prevented. A package constructed in accordance with the invention has been tested and found to withstand considerable misuse as compared to other packages now used for the purpose.

Changes in the specific form of the invention, as herein described, may be made within the scope of what is claimed without departing from the spirit of the invention.

Having described the invention, what is claimed as new and desired to be protected by Letters Patent is:

1. An outboard motor package comprising a box having a top, a bottom, a front, a back and sides, a supporting insert including two posts disposed along the sides

of the box and extending substantially from the top to the bottom of the box, retaining means comprising a forward wall structure including a partition extending across and attached to said posts, side wall sections issuing from said partition and extending along the sides of the box and engaging the front of the box, a rearward wall structure including side wall sections overlying the sides of the box, flanges issuing therefrom and attached to said posts, and other flanges issuing from said side wall sections and overlying and engaging the back of the box, a cross bar attached to said posts and supporting the motor and a brace structure including diagonal walls extending from said partition to the corners between the side wall sections and the rear wall flanges of said rearward wall structure and an intermediate wall connected to said diagonal walls and overlying and attached to said partition.

2. An outboard motor package comprising a box having a top, a bottom, a front, a back and sides, a supporting insert including two posts disposed along the sides of the box and extending substantially from the top to the bottom of the box, retaining means comprising a forward wall structure including a partition extending completely across and attached to said posts, side wall sections issuing from said partition and extending along the sides of the box and engaging the front of the box, a rearward wall structure including side wall sections overlying the sides of the box, flanges issuing therefrom and attached to said posts, and other flanges issuing from said side wall sections and overlying and engaging the back of the box, a cross bar attached to said posts and supporting the motor, a brace structure including diagonal walls extending from said partition to the corners between the side wall sections and rear wall flanges of said rearward wall structure and an intermediate wall connected to said diagonal walls and overlying and attached to said partition and a flap issuing from said partition and overlying a portion of said intermediate wall and secured thereto.

3. In combination with a box having a top, a bottom, a front, a back and sides, an outboard motor supporting insert disposed within said box including two posts disposed along the sides of the box and extending substantially from the top to the bottom of the box, retaining means comprising a forward wall structure including a partition extending across and attached to said posts, side wall sections issuing from said partition and extending along the sides of the box and engaging the front of the box, a rearward wall structure including side wall sections overlying the sides of the box, flanges issuing therefrom and attached to said posts, and other flanges issuing from said side wall sections and overlying and engaging the back of the box, a cross bar attached to said posts and supporting the motor and a brace structure including diagonal walls extending from said partition to the corners between the side wall sections and the rear wall flanges of said rearward wall structure and an intermediate wall connected to said diagonal walls and overlying and attached to said partition.

4. In combination with a box having a top, a bottom, a front, a back and sides, an outboard motor supporting insert disposed within said box including two posts disposed along the sides of the box and extending substantially from the top to the bottom of the box, retaining means comprising a forward wall structure including a partition extending across and attached to said posts, side wall sections issuing from said partition and extending along the sides of the box and engaging the front of the box, a rearward wall structure including side wall sections overlying the sides of the box, flanges issuing therefrom and attached to said posts, and other flanges issuing from said side wall sections and overlying and engaging the back of the box, a cross bar attached to said posts and supporting the motor, a brace structure including diagonal walls extending from said partition to the corners betwen the side wall sections and rear wall flanges of said rearward wall structure and an intermediate wall connected to said diagonal walls and overlying and attached to said partition and a flap issuing from said partition and overlying a portion of said intermediate wall and secured thereto.

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