

July 15, 1941.

P. F. BOEYE

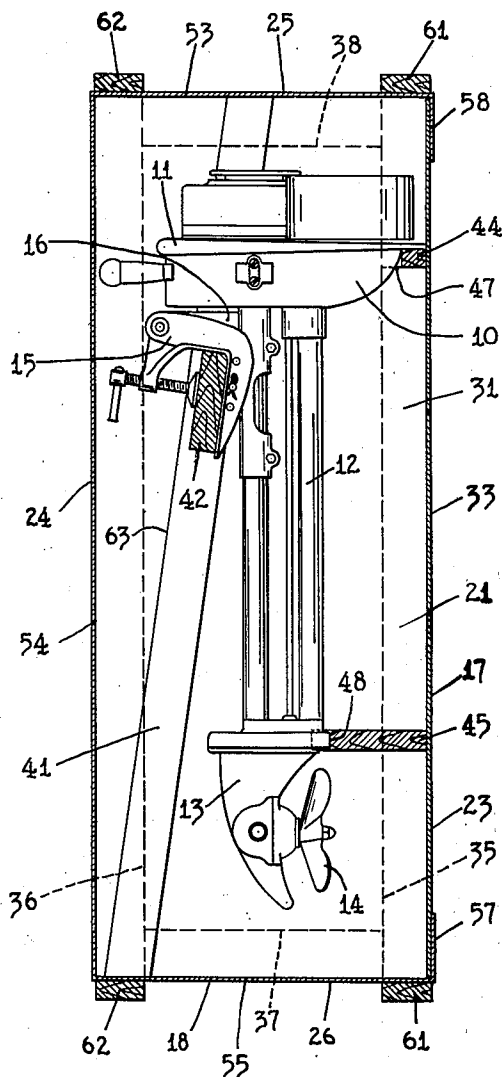
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BOX

Filed Jan. 14, 1939

3 Sheets-Sheet 1

Fig. 1



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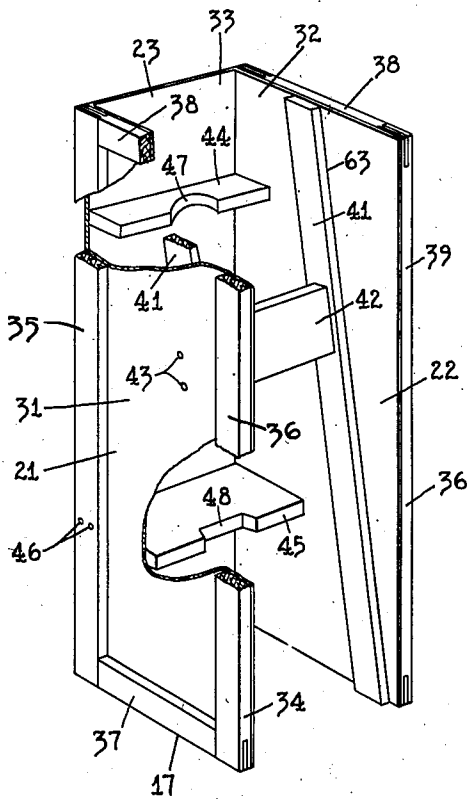


Fig. 2

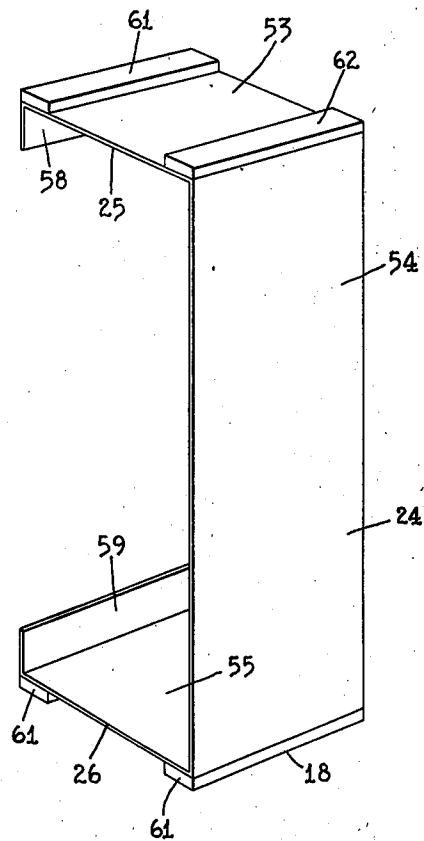


Fig. 3

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3 Sheets-Sheet 3

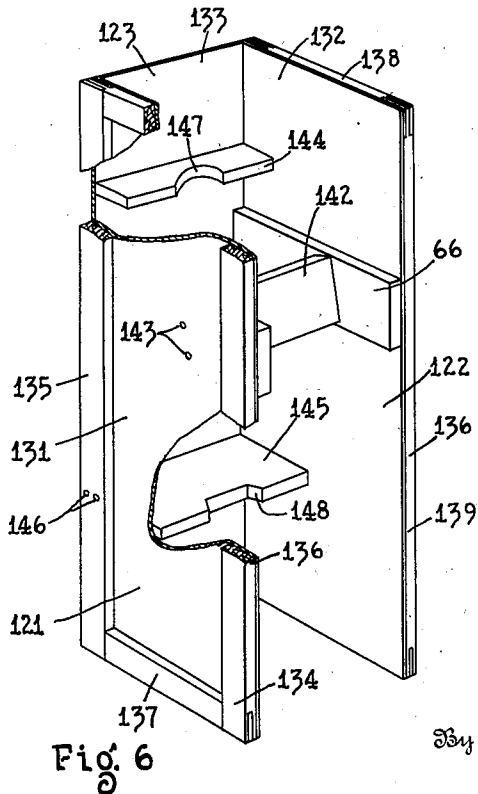
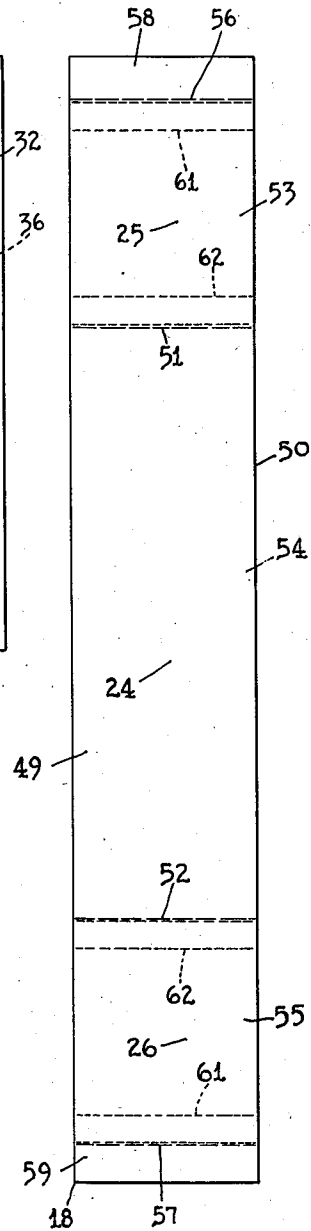
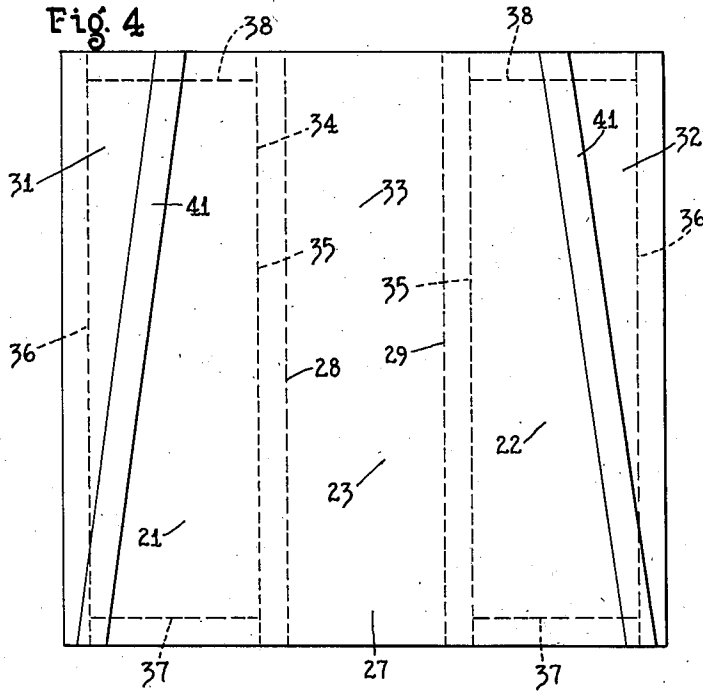


Fig. 5
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UNITED STATES PATENT OFFICE

2,249,270

BOX

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Application January 14, 1939, Serial No. 251,000

3 Claims. (Cl. 217-36)

My invention relates to boxes and has for an object to provide a box in which an outboard motor may be properly supported for shipment or storage.

An object of the invention resides in providing a box which will be light in weight and rigid in construction and of sufficient strength to perform the desired function.

A still further object of the invention resides in providing a box which can be constructed of paper board and wood.

A feature of the invention resides in providing a box which can be constructed with a minimum amount of material and at a relatively low cost.

Another object of the invention resides in providing a box which may be used for supporting the motor when the motor is out of use and which may also be used for the display of outboard motors.

In carrying out my invention I employ a box having side walls formed with cleats disposed upon the exterior thereof and uses in conjunction therewith two cleats disposed upon the interior and secured to said outer cleats. In conjunction therewith I employ a cross bar which is attached to the last named cleats and which is adapted to receive the clamp of the outboard motor and support the motor therethrough.

It is an object of the invention to provide additional braces for engagement with the motor and in attaching said braces to the outermost cleats of the box.

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 longitudinal elevational sectional view of a box illustrating an embodiment of my invention.

Fig. 2 is a perspective view of the rear and side walls of the box.

Fig. 3 is a perspective view of the front, top and bottom walls of the box detached from the side and rear walls.

Fig. 4 is a developed view of the structure shown in Fig. 2.

Fig. 5 is a developed view of the structure shown in Fig. 3.

Fig. 6 is a perspective view similar to Fig. 2 showing a modification of the invention.

For the purpose of explaining the use of my invention I have shown in Fig. 1 an outboard motor 10, such as used for propelling row boats and similar boats which is intended to be housed

or contained within the box comprising my invention. This motor includes an engine 11 having a tubular structure 12 depending therefrom. At the lower end of the tubular structure 12 is a gear case 13 which rotatably supports a propeller 14 driven by suitable transmission from the engine 11 and contained within the tubular structure 12 and the case 13. A C-clamp 15, pivotally attached to a bracket 16 formed on the engine 11 serves to attach the motor to the boat and is used in the instant invention for supporting the motor within the box.

The box proper consists of two wall assemblies 17 and 18 which are shown in detail in Figs. 2, 3, 4 and 5. The wall assembly 17 includes the side walls 21 and 22 and the rear wall 23 of the box. The assembly 18 includes the front wall 24, the top wall 25 and the bottom wall 26 of the box. These parts will now be described in detail.

The wall assembly 17 is constructed from a blank formed of paper board or some similar material which can be readily folded into the desired form and which is indicated by the reference numeral 27. This blank is scored along lines 28 and 29 to form three panels 31, 32 and 33 which constitute the walls 21, 22 and 23. Attached to the outer surface of the panel 31 is a frame 34 which consists of vertical cleats 35 and 36 and horizontal cleats 37 and 38. The cleats 35 and 36 are disposed at the vertical edges of the panel 31, while the cleats 37 and 38 are disposed at the upper and lower edges of said panel. These cleats are joined together at the corners as indicated to form a rigid frame which frame is attached to the panel 31 by gluing, stitching, nailing or in any other suitable manner. Attached to the panel 32 is a similar frame 39 which is constructed in identically the same manner as the frame 34. The description of the frame 39 will not be repeated and the same reference numerals will be used to indicate corresponding parts.

Upon the interior of the panels 31 and 32 are mounted two obliquely extending cleats 41 which are attached through the panels 31 and 32 to the cleats 37 and 38. Extending across the cleats 41 is a cross bar 42 which is adapted to receive the clamp 15 of the motor 10 when the motor is mounted within the box as shown in Fig. 1. The cross bar 42 may be secured to the cleats 41 by means of nails 43 which are driven through the panels 31 and 32 and the cleats 41 into said cross bar. In addition to the cross bar 42, two braces 44 and 45 are employed which extend across the two walls 21 and 22 and which are

secured to the cleats 35 by means of nails 46. These braces are formed with notches 47 and 48 which serve a purpose to be presently more fully described.

The wall assembly 18 is constructed from a blank 50 made of paper board or other similar material such as that used in the formation of the blank 27. This blank is scored transversely along lines 51 and 52 to divide the blank into panels 53, 54 and 55. The panel 54 forms the front wall 24 of the box, while the panels 53 and 55 form the top and bottom walls 25 and 26 respectively. In addition to the scores 51 and 52 two additional scores 56 and 57 are employed which are disposed near the ends of the blank and parallel with the scores 51 and 52. These scores provide flaps 58 and 59 at the ends of the panels 53 and 55.

Attached to the panels 53 and 55 are transversely extending cleats 61 and 62 which are situated at the front and rear corners of the walls 25 and 26. These cleats are secured to the said panels 53 and 54 in the same manner as the frames 34 and 39.

The use of the invention is as follows: The box originally comes with the two wall assemblies open up and flat and with the cross bar 42 and the braces 44 and 45 detached therefrom. In first erecting the box, the panels 31 and 32 are folded along the scores 28 and 29 to bring the walls of the box in the form shown in Fig. 2. Thereafter the braces 44 and 45 are positioned between the walls 21 and 22 and the nails 46 driven through cleats 35 and into the ends of these braces to attach the same to the side walls 21 and 22. The cross bar 42 is next positioned between the cleats 41 and the same similarly attached to said cleats by driving the nails 43 through the panels 31 and 32 and through the cleats 41 into the ends of the cross bar 42. The wall assembly 17 is now ready to receive the motor. The said assembly, being open at the top and front, the motor can be readily inserted into the same and the clamp 15 opened up and applied to the cross bar 42. When the motor is in position the clamp is tightened up and the motor is rigidly attached to the cross bar. For bracing the motor the braces 44 and 45 are used. The notch 47 in the brace 44 is adapted to engage a portion of the engine 11, while the notch 48 in the brace 45 is adapted to engage a portion of the gear case 13. By means of these notches the motor is steadied so as to be deprived of lateral movement and by means of the support procured through said braces and the cross bar 42 the motor is otherwise firmly held from movement, so that the motor becomes rigidly supported in the box out of contact with the walls of the box. After the motor is properly mounted, the wall structure 18 is applied to the wall structure 17 and the panels thereof as well as the flaps 58 and 59 and the cleats 61 and 62 are nailed to the edges of the cleats forming the frames 34 and 39. The box is now closed and ready for shipment.

Upon removal of the wall structure 18 from the box the motor becomes fully exposed. The wall structure 17 may be used as a support for supporting the motor when the same is out of use, thereby eliminating the necessity of providing a special rack for supporting the motor and making it possible to support the motor off from the ground. If the box is desired for display purposes the two side walls 21 may be cut off along lines 63 which follow along the forward edges of the cleats 41. The motor is then almost en-

tirely exposed and may be easily examined and manipulated while supported.

In Fig. 6 I have shown a modified form of wall structure including the rear and side walls. Inasmuch as most of the structure shown in this modification is the same as that previously described, the description of such structure will not be repeated and the same reference numerals preceded by the digit 1 will be used to designate corresponding parts. The difference in the form of the invention shown in Fig. 6 consists in utilizing two relatively wide short cleats 66 instead of the cleats 41 employed with the other form of the invention. These cleats are secured to the cleats 135 and 136 instead of to the cleats 37 and 38 as with the other form of the invention. The cross bar 142 is attached to the cleat 66 in the same manner through nails 143. The form of the invention shown in Fig. 6 utilizes somewhat less material than that shown in Fig. 2 but otherwise functions in practically the same manner. The method of using the construction shown in Fig. 6 is identical with that described in conjunction with the box shown in Fig. 2.

The advantages of my invention are manifest. An extremely simple and practical construction is provided for housing outboard motors. The box can be constructed at a nominal expense and utilizes paper board and wood. The box is extremely strong and is considerably lighter than similar boxes constructed entirely of wood. The box can be made more dust tight than is possible with wooden boxes. The box may also be used as a support for the motor when the same is in disuse. My improved box can also be used as a display rack for supporting the motor in the store where the same is to be sold or displayed. My improved box is easy to use and assemble and requires no special tools or equipment for the purpose. The box comes completely knocked down and flat so that the same requires a minimum amount of space in shipment or storage.

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

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

1. A box for carrying a motor having a C-clamp opening downwardly and disposed at an angle relative to the drive shaft housing, said box having a wall structure comprising side walls and a rear wall hingedly connected together, said box being open at the top and front, said side walls having cleats extending along the vertical edges and disposed upon the exterior thereof, two transverse cleats disposed upon the interior of the box and extending across the side walls and secured to the cleats thereof, a cross bar extending across said second named cleats and butting against the same, said cross bar being of a width greater than its thickness and being disposed in angular relation with respect to the rear wall of the box to correspond to the angularity of the clamp and with its greater transverse dimensions extending in an up and down direction, said second named cleats being of a width corresponding to the width of said cross bar, fasteners extending through the second named cleats and endwise into the cross bar for holding the cross bar in angular position, said fasteners being disengageable from said cross bar upon swinging of the side walls away from one another, said motor being insertable into the box through the open upper end thereof to bring the downwardly open-

ing clamp into engagement with said cross bar, a brace secured to certain of said first named cleats and disposed upon the interior of the box, said brace engaging the motor at a locality spaced from the cross bar, and means for closing the open portion of the box.

2. A box for carrying a motor having a C-clamp opening downwardly and disposed at an angle relative to the drive shaft housing and situated intermediate the upper and lower ends of the motor, said box having a wall structure comprising side walls and a rear wall connected together at adjoining vertical edges, said side walls having cleats extending along the connected vertical edges and disposed upon the exterior thereof, two transverse cleats disposed upon the interior of the box and extending across the side walls intermediate the upper and lower ends thereof and secured to said cleats, a cross bar extending across said second named cleats and butting against the same, said cross bar being disposed in angular relation with respect to the rear wall of the box to correspond to the angularity of the clamp, fasteners extending through the second named cleats and endwise into the cross bar, the clamp of the motor being adapted to engage said cross bar to hold the motor within the box, a brace secured to said first named cleats at a locality below said cross bar and disposed upon the interior of the box for engagement with a portion of the motor below said clamp and a second brace secured to said first named cleats at a locality above said cross bar for engagement with a portion of the motor above said clamp.

3. A box for carrying a motor having a C-clamp opening downwardly and disposed at an angle relative to the drive shaft housing and situated intermediate the upper and lower ends of the motor, said box having a wall structure comprising side walls and a rear wall connected together at adjoining vertical edges, said side walls having cleats extending along the connected vertical edges and disposed upon the exterior thereof, two transverse cleats disposed upon the interior of the box and extending across the side walls intermediate the upper and lower ends thereof and secured to said cleats, a cross bar extending across said second named cleats and butting against the same, said cross bar being disposed in angular relation with respect to the rear wall of the box to correspond to the angularity of the clamp, fasteners extending through the second named cleats and endwise into the cross bar, the clamp of the motor being adapted to engage said cross bar to hold the motor within the box, a brace secured to said first named cleats at a locality below said cross bar and disposed upon the interior of the box for engagement with a portion of the motor below said clamp and a second brace secured to said first named cleats at a locality above said cross bar for engagement with a portion of the motor above said clamp, said braces having notches therein receiving portions of the motor and restraining swinging of the motor laterally on the clamp.

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