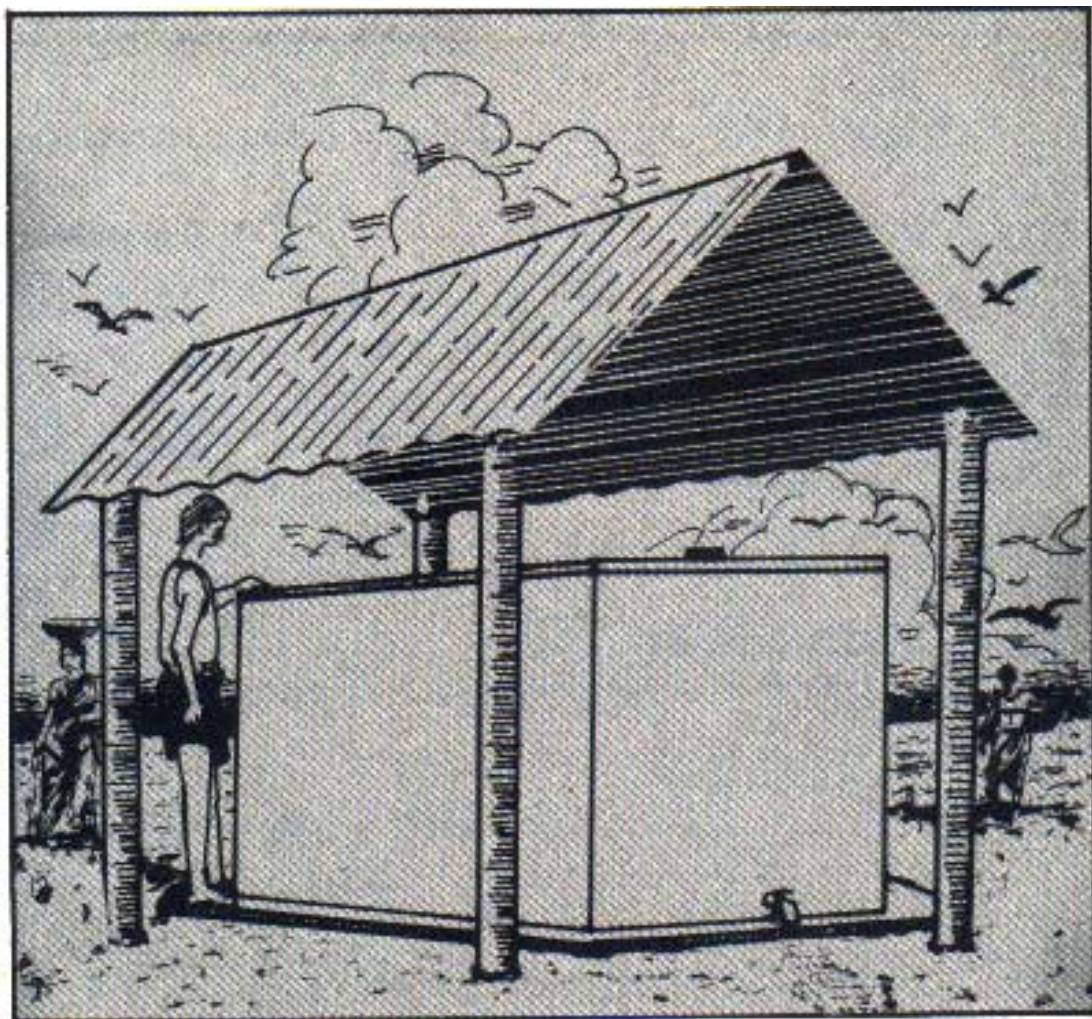




PERMANENT ICE BOX: CONSTRUCTION SPECIFICATIONS



BAY OF BENGAL PROGRAMME

POST-HARVEST
FISHERIES
PROJECT

Overseas Development Administration

TWO-TONNE PERMANENT ICE BOX (P.I.B.)

SUGGESTED CONSTRUCTION SPECIFICATIONS

Materials

Cement	– 20 bags
Thermocol sheets	– 1.5m x 0.5m x.05m: 70 sheets
Wooden joists	– 4in x 2in x 1.5m: 8 nos.
G.I. Sheet	– 3.5m x 2.5m: 1 sheet
Tar	– 12litres
Plywood	– 6ftx4ftx8mm:2sheets
Bricks	– 1600nos.
Other materials: sand, reinforcing steel, waterproof additives.	

Dimensions :

Outer length	– 3.1m
Inner length	– 2.4m
Outer breadth	– 2.0m
Inner breadth	– 1.3m
Outer height	– 1.3m
Innerheight	– 1.0m

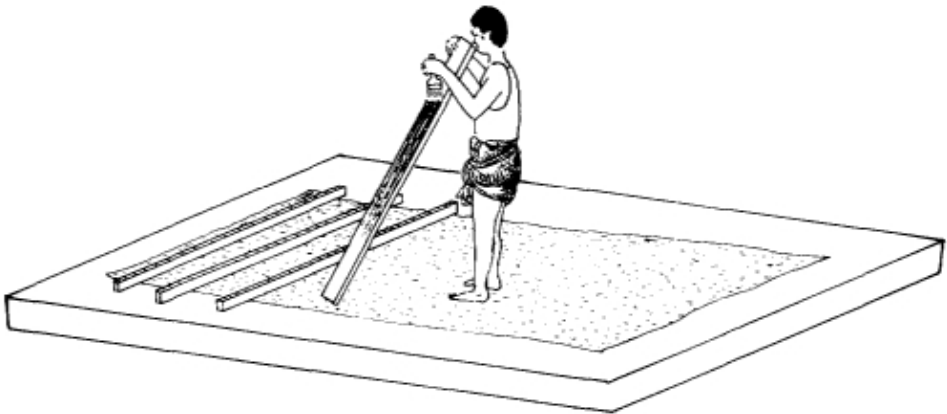
Capacity

3.0 cubic meters (upto 2 tonnes of fish with ice)

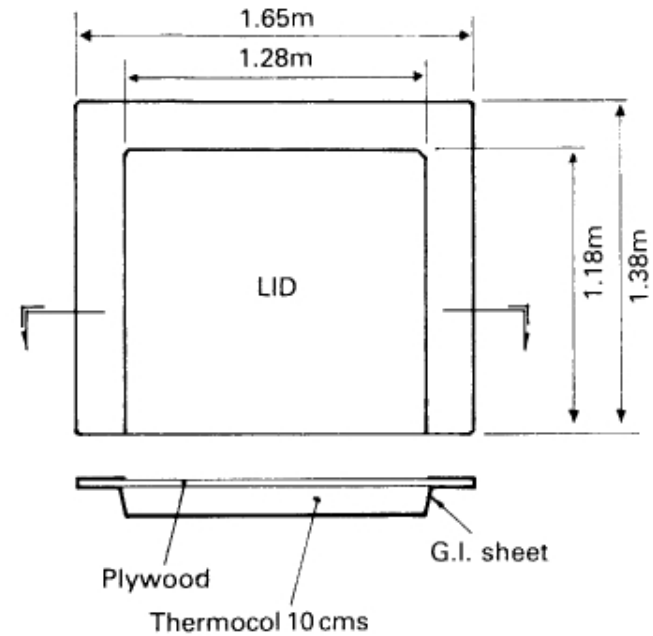
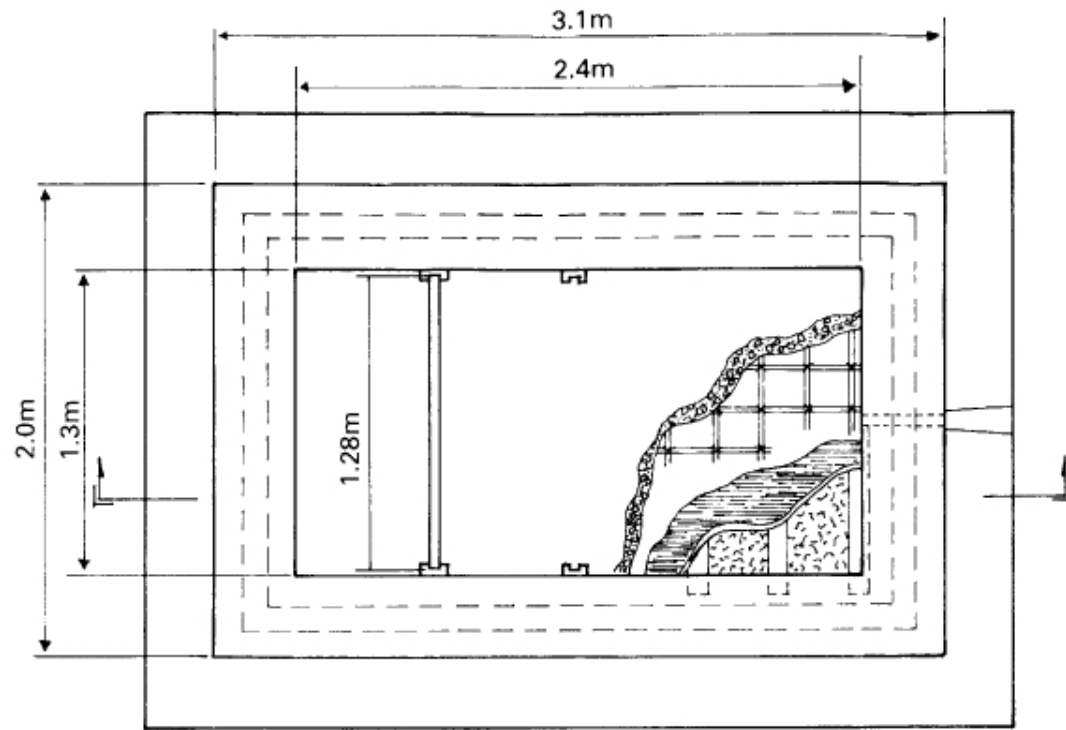
Approximate cost

Rs.20,000

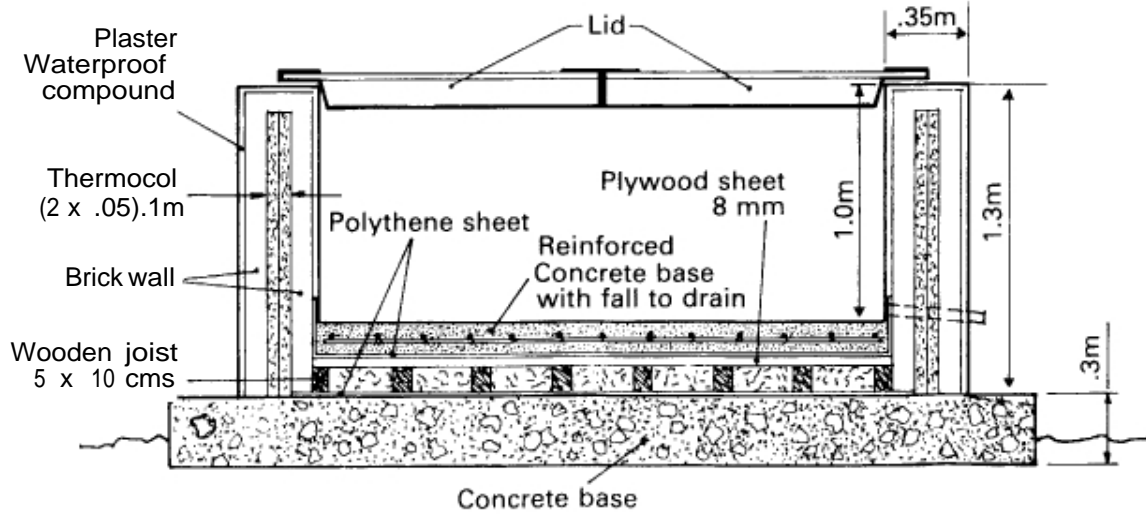
PROCEDURE:





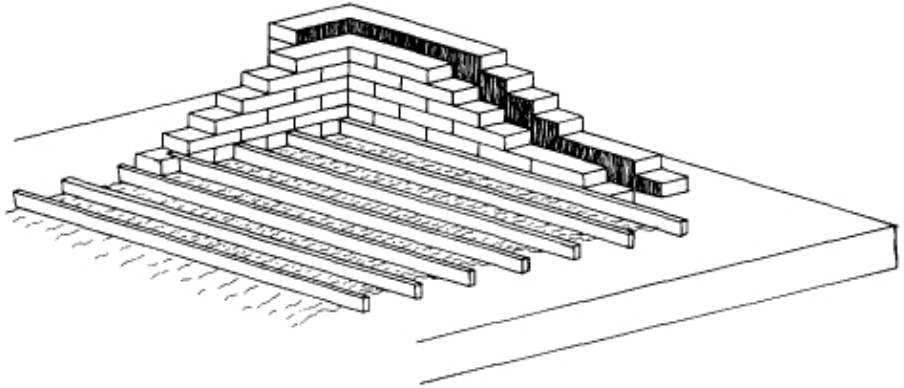
1. Lay foundation and coat with tar. Place a polythene sheet on the foundation. Coat joists with tar and arrange over the polythene sheet.



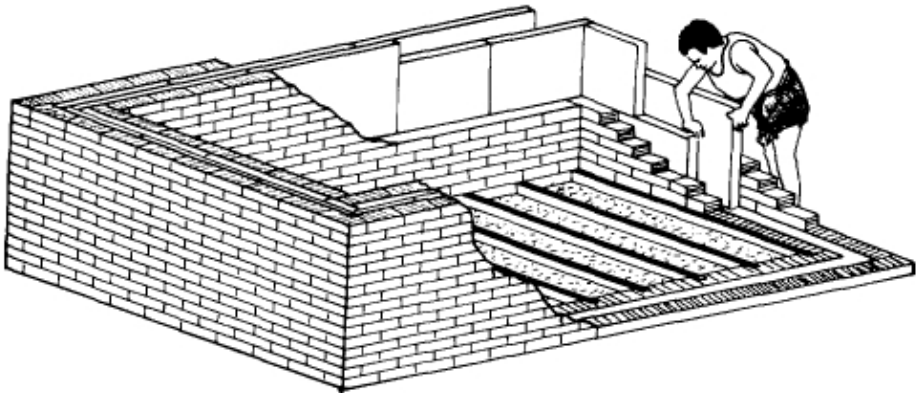
Detail of the Lid



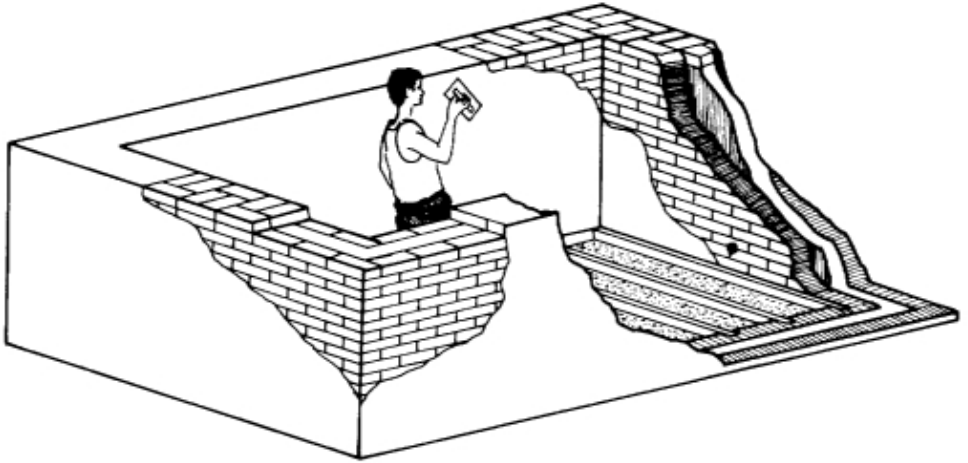
	Permanent Ice Box (PIB)	
		
Design : ODA Post-harvest Fisheries Project	Drawn :	
	Madras, May 1991	



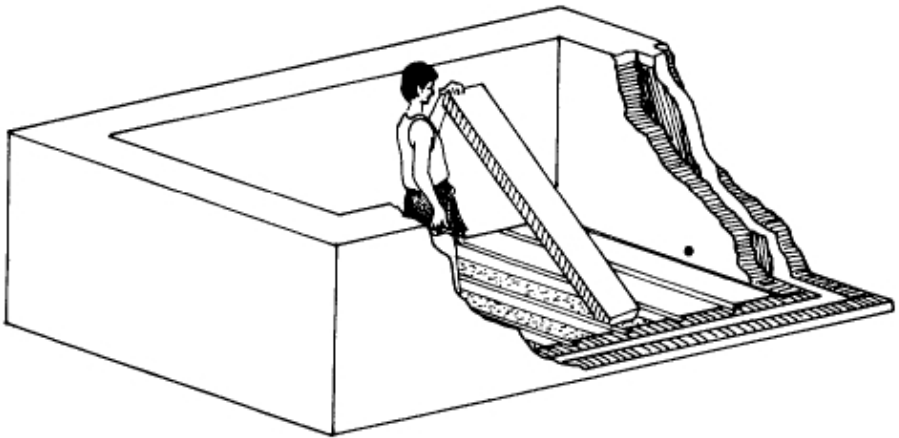
2. Starting at corners, raise double wall with 0.1m gap. Joists to penetrate inner skin.



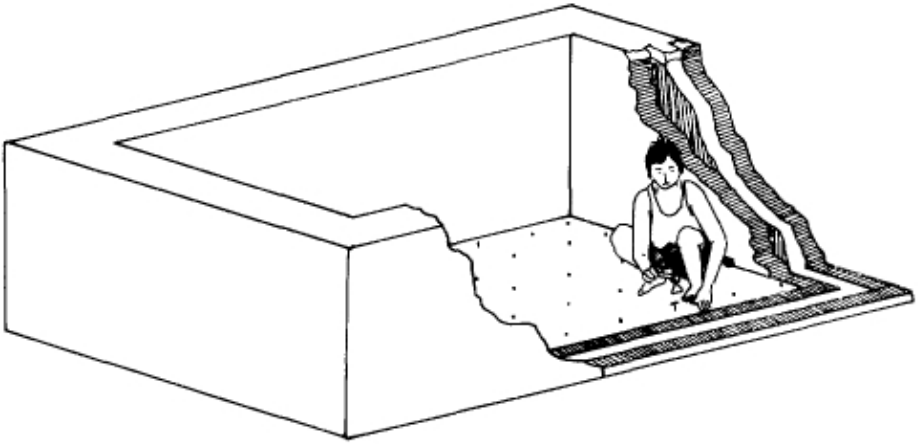
3. Insert double layer of Thermocol as walls are raised, ensuring that there is no straight air passage between inner and outer walls.



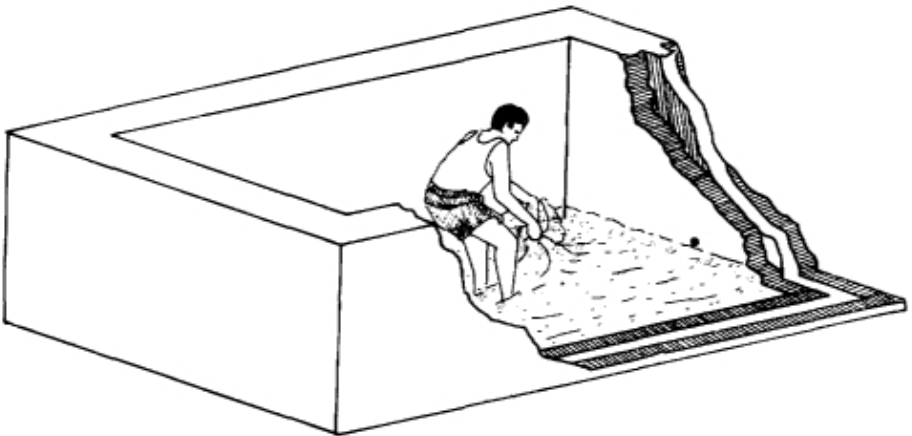
4. Cover the top of the walls with a layer of brick. Plaster the walls.



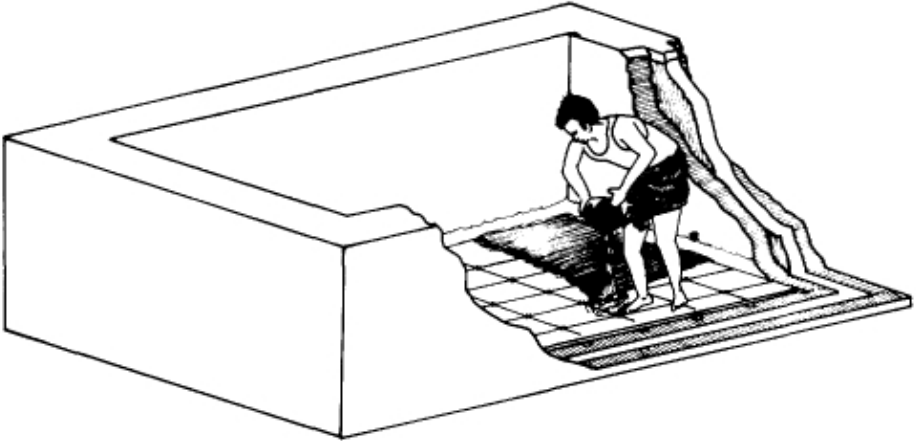
5. Lay Thermocol between joists.



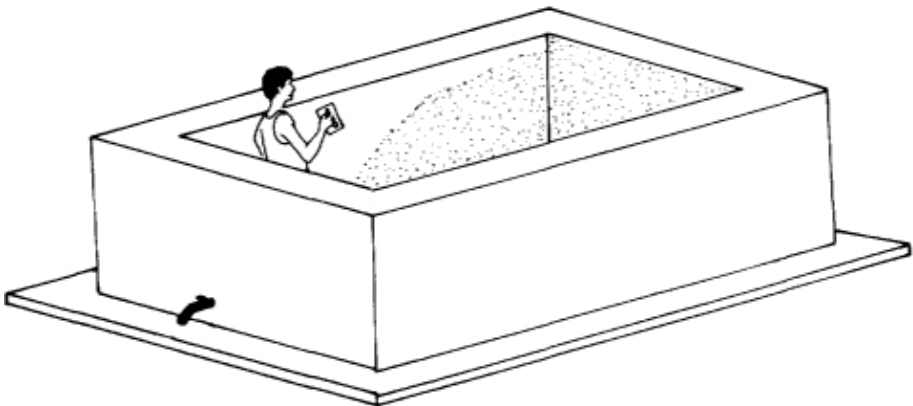
6. Place plywood on top and nail.



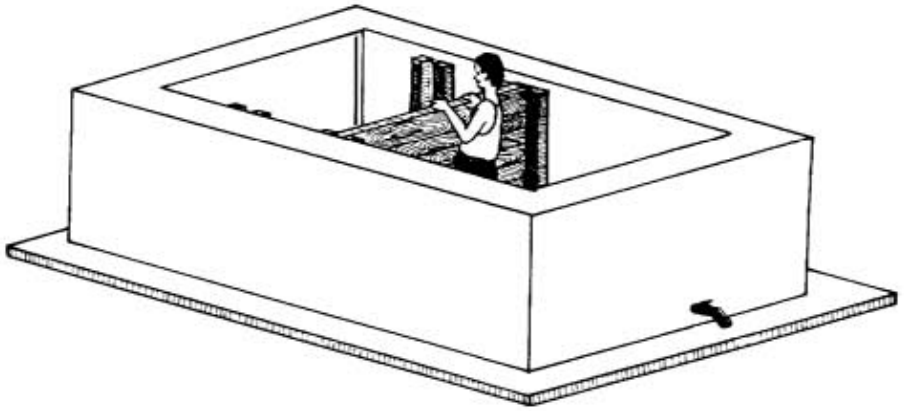
7. Coat plywood with tar and place polythene sheet over it.



8. Pour reinforced concrete on to a base with a fall to a drain in a side wall. Fit a drain tap to the drain.

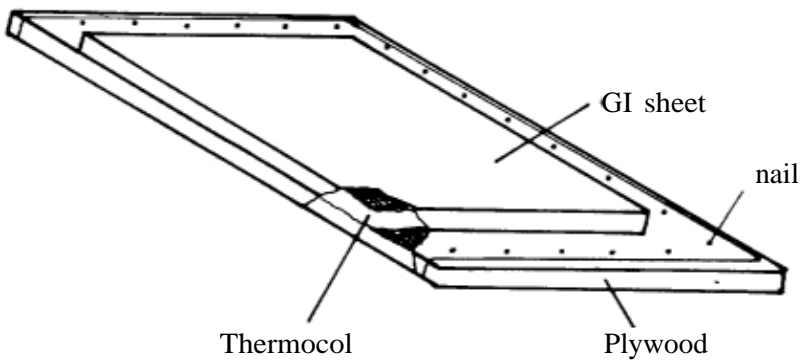


9. Mix waterproof compound with cement plaster. Finish walls and base. Alternatively coat wall and base with tar.



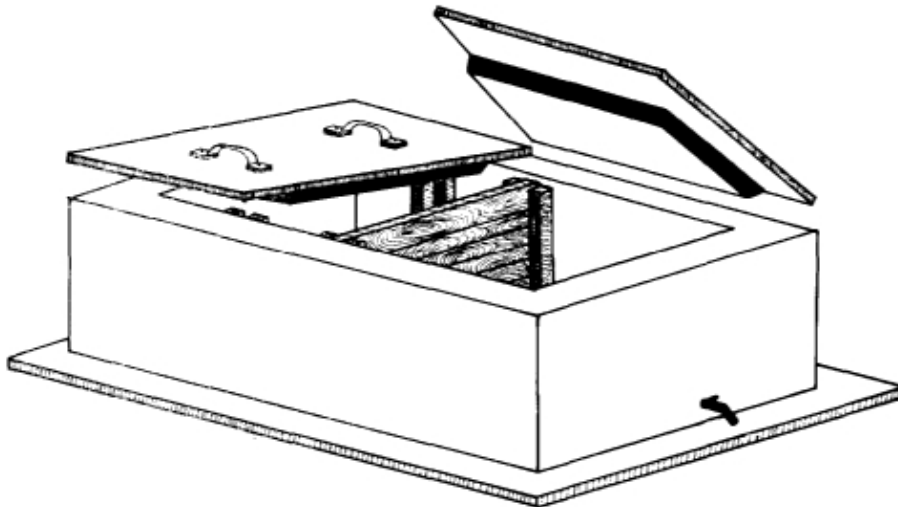
10. Construct wooden channels for partitions.

LID CONSTRUCTION



Fold GI sheet in the form of a tray and rivet corners. Insert Thermocol and nail GI sheet to plywood. Fix handles and paint.

The Finished PIB



HOW TO USE THE P.I.B.

Store only good quality fish.

Store fish between layers of crushed ice.

Always put layer of ice on floor before placing fish.

Always put layer of ice on top of fish.

Allow dirty water to drain away.

Keep lid tightly closed.

Move boards to accommodate blocks of ice or fish as needed.

Avoid treading on fish.

Wash fish in clean water before icing.

Keep close check on stock and ensure good rotation.

Always keep box scrubbed clean.

*When you build a PIB
You're saying "Yes" to quality
Store your fish there every day
and keep your money blues at bay!*

Remember: good management of the P.I. B. is the key to maximizing profits!

For further information contact:

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