

## A Miniature REVENUE CUTTER which actually sails!

Full-size plans by M. M. Staff



**T**HIS little model is based on the well-known revenue cutters of the late 18th and early 19th centuries. These small vessels, descended from Dutch yachts, were first built for the Navy as dispatch vessels but proved fast and handy and therefore ideal for chasing the vast numbers of luggers and sloops which in these days carried out an enormous amount of smuggling. Speed was essential in view of the relatively short distance the smugglers had to sail from the French coast, and this led to more and more sail being carried by the cutters. In heavy weather the bowsprit could be run in and sail shortened right down; it was this movable bowsprit that defined a cutter.

The example shown carries eight guns, which were probably 3 pdrs., but some of these little craft carried six guns a side, two stern-chasers, and two or three deck-mounted swivel guns, on a hull length of about 60 ft.

Our model is built on a centre profile of  $\frac{1}{8}$  in. hard balsa with two  $\frac{1}{2}$  in. balsa laminations cemented each side before carving and sanding to shape. The deck can be covered with paper on which the planks etc. have been drawn with a sharp pencil, and the bulwarks are then fitted on, using  $\frac{3}{16}$  in. wide strips cut off cross-grain from a  $\frac{1}{16}$  in. sheet. Cement the chain-plates on, then apply sanding sealer, sand thoroughly, and paint the hull medium brown. If desired, the below water-line section can be cream, green, or black, and the inside of the bulwarks red.

With so small a model, the mast and spars can be hard balsa, which is easier to taper than dowel. Glue the mast in a drilled hole in the deck and make the shrouds with black cotton. Glue one end (with a bit spare) in a nick in one chain-plate, pass it one turn round the mast, and glue into the corresponding nick in the other plate. Do this for each pair of shrouds. Make pin-holes in the hull below the plates, trim the loose shroud ends, and push them into the pin-holes (with a pin) with a touch of glue.

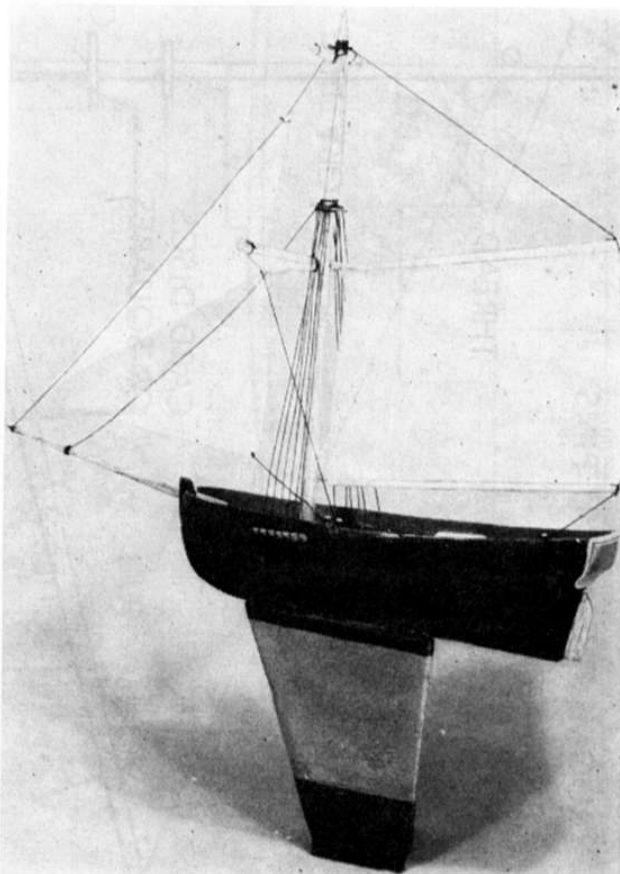
The mainsail gaff and boom are attached to the mast with clipped-off pins made to as small an eye as possible, and the foresail and jib are glued direct to the thread

stays, so the basic rigging is next. It is advised that the two square sails on the mast are shown furled, otherwise if you sail the model it will tend only to blow downwind, so there are just three sails to cut from a lightweight white polythene food bag. These are stuck (Bostik No. 1 is best, but a contact adhesive will do) to the gaff and boom, and the stays, as appropriate.

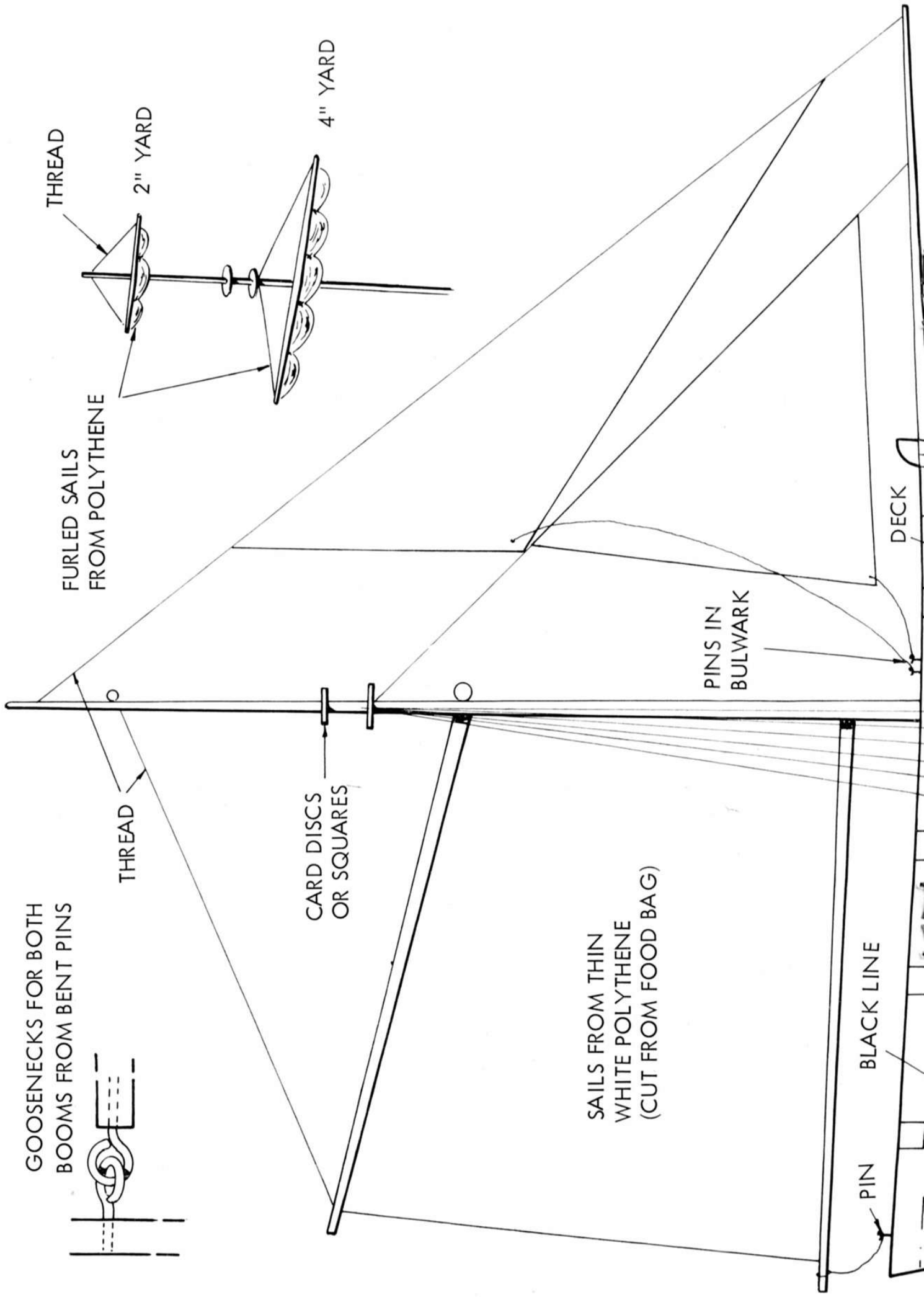
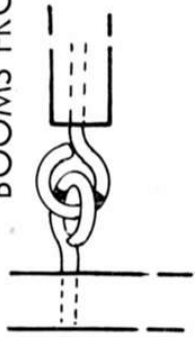
Small pins (lills) driven into the bulwarks provide points on which the sheets can be made off, and the sheets are just cottons knotted and glued to the clew (bottom rear corner) of each sail.

Deck detail—gratings, bits, etc.—are sketched on the plan, as is gun construction. These should all be made from scraps of wood or plastic rather than metal, to save weight.

For sailing, a false keel is essential, both for stability and to prevent the model from simply blowing sideways. Weigh the complete boat, then cut a piece of sheet lead heavy enough to bring the total weight up to approximately  $1\frac{3}{4}$  ozs. and fold it on to the false keel. The keel becomes virtually invisible when the model is afloat, and the interest that the sight of so different a model will arouse will well repay the time in building it.



GOOSENECKS FOR BOTH  
BOOMS FROM BENT PINS



THREAD

2" YARD

4" YARD

FURLED SAILS  
FROM POLYTHENE

THREAD

CARD DISCS  
OR SQUARES

PINS IN  
BULWARK

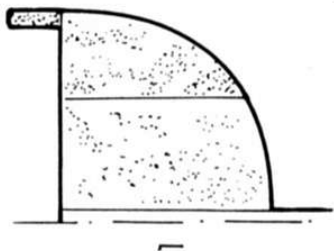
DECK

SAILS FROM THIN  
WHITE POLYTHENE  
(CUT FROM FOOD BAG)

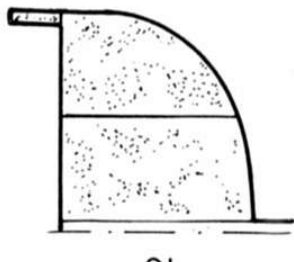
BLACK LINE

PIN

CUT TWO 1/2" LAMS. TO THIS LINE  
 CUT TWO 1/2" LAMS. TO THIS LINE  
 CUT ONE 1/8" FULL PROFILE (LESS  
 BULWARKS)



WINDLASS



2



BOWSPRIT HEEL

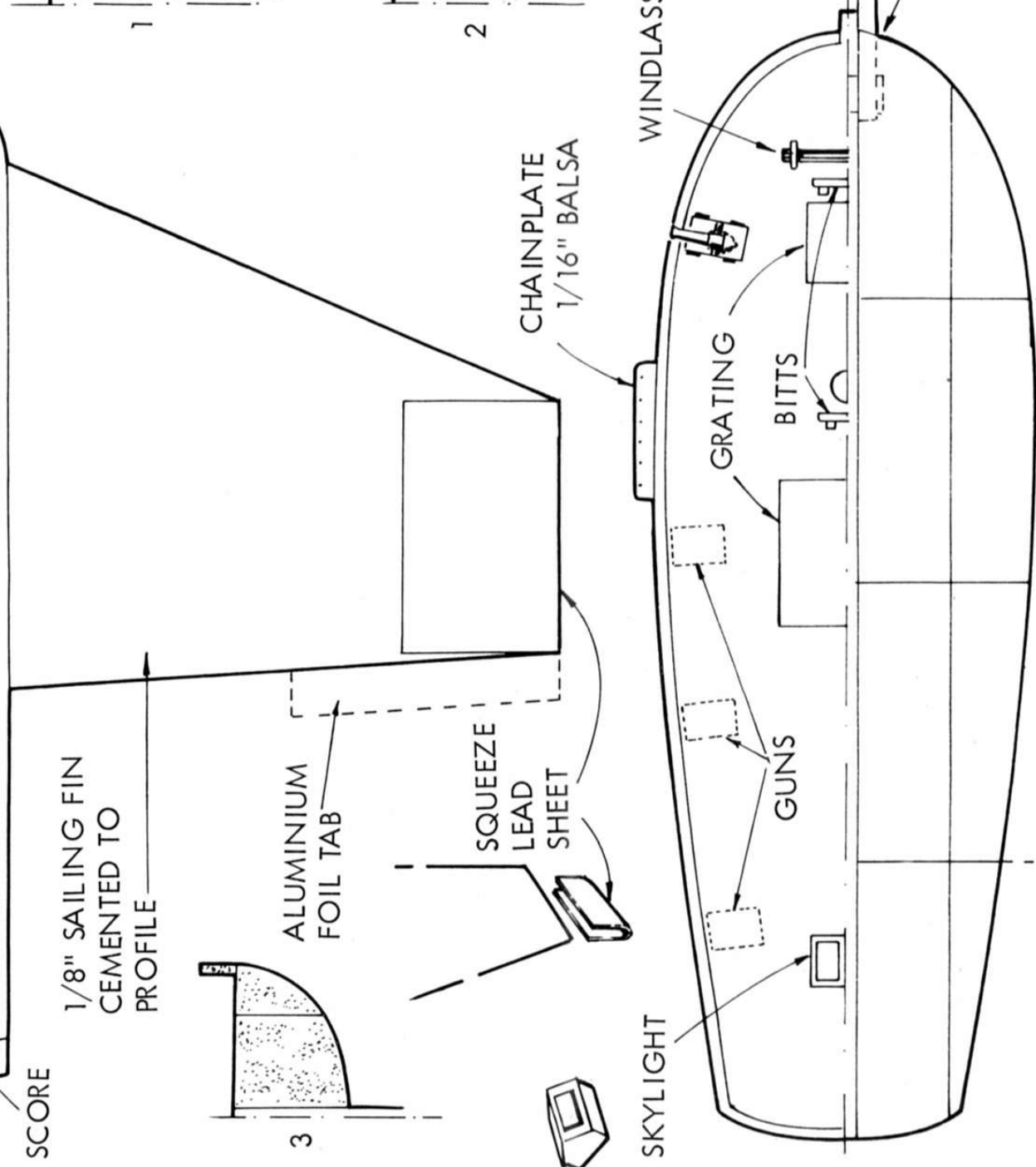


GUNS



BITTS

WL



CHAINPLATE  
 1/16" BALSA

WINDLASS

GRATING

BITTS

GUNS

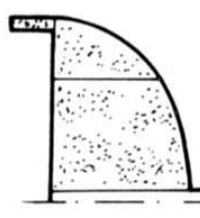
SKYLIGHT

NOTE - BOWSPRIT OFFSET  
 TO STARBOARD

1/8" SAILING FIN  
 CEMENTED TO  
 PROFILE

ALUMINIUM  
 FOIL TAB

SQUEEZE  
 LEAD  
 SHEET



3

SCORE

2

3