

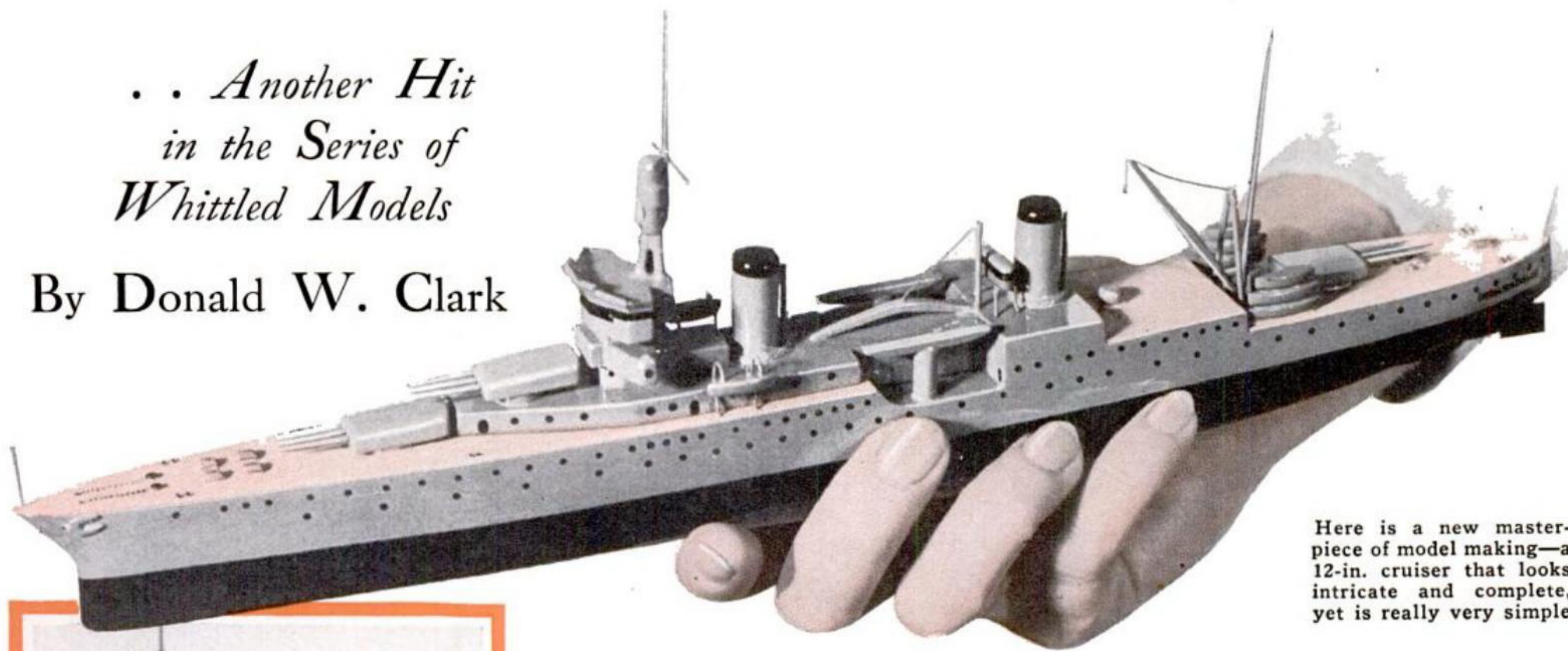


THE HOME WORKSHOP

MODEL MAKING : HOME WORKSHOP CHEMISTRY : THE SHIPSHAPE HOME

. . . *Another Hit*
in the Series of
Whittled Models

By Donald W. Clark



Here is a new masterpiece of model making—a 12-in. cruiser that looks intricate and complete, yet is really very simple

Anyone can build this simplified

CRUISER MODEL

U.S.S. *Indianapolis*



The *Indianapolis* model from the stern. It is exceptionally decorative from every angle

THE graceful, racy lines of the new 10,000-ton U. S. Navy cruisers offer an incentive to the model maker who likes to build modern ocean-going craft. The plans on the two following pages show how to construct a 12-in. model of U.S.S. *Indianapolis*, one of the more recently completed cruisers of the group. It is an excellent model for beginners to start with and will be found much easier to paint than the liner *Manhattan*, the pocket-

knife model described in one of the previous articles (P.S.M., Feb. '33, p. 63).

This cruiser model has but 96 parts, not counting the range finders on the turrets and part S, which may be omitted if desired. They are shown on the drawings, but were purposely left off the model illustrated in the photographs.

The methods of assembling and the materials are similar to those used for the *Manhattan* and also for the various airplane models described thus far in this series. The ordinary hand tools found in any home workshop, together with a pair of tweezers and a few single-edged razor blades, will serve for this job; in fact, most of the work could be done with a small, sharp pocketknife if necessary. Five sizes of white pine, thin aluminum, cardboard, soft wire, safety-match sticks, common pins, and a bit of thread complete the list of required materials. The itemized list appears on page 59.

Start the hull by sawing out a pine block a trifle larger than the blank or over-all dimensions, and plane it to the

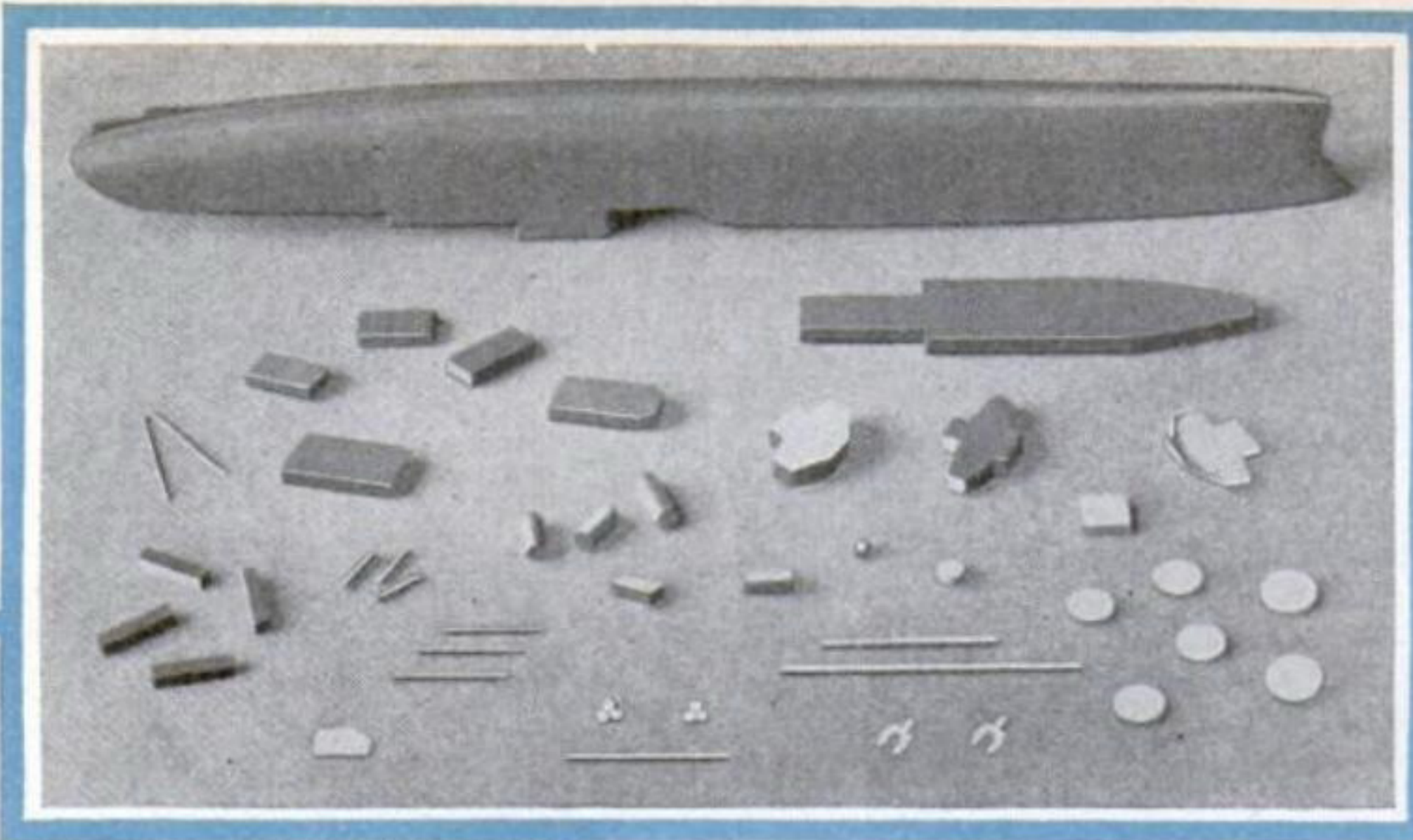
exact size. This is important in order to get the right shape. Mark a center line completely around the blank; also, mark the different deck levels, which should be cut in carefully with a fine-toothed saw and smoothed with a file.

Next mark the profile lines of the bow and stern on the blank and cut to these accurately. Be very careful not to cut too deep at the stern. Draw the curves of the top plan on thin cardboard, cut them out, and trace around them on the blank. By using a long-pointed pencil, you will have no difficulty in putting the stern lines on in spite of the different deck levels. Carve away the excess wood up to the lines thus drawn, and round the bottom edges amidships to a radius of 3/16 in.

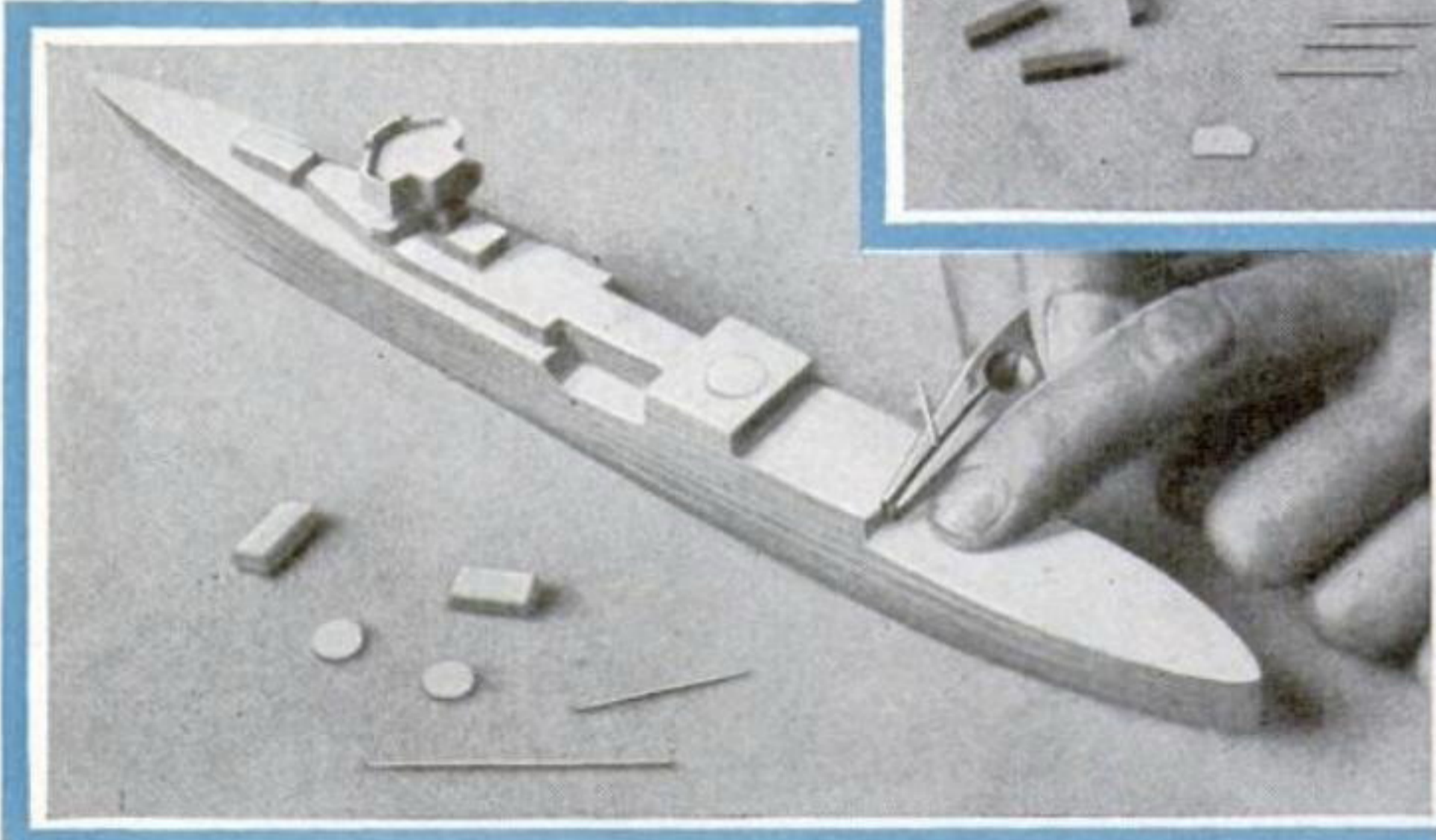
Taper the bow and stern, using your eye to keep the contour true. Cup the sides of the bow a little as shown, and be careful to preserve the keel and rudder support at the other end. Smooth with medium and then fine sandpaper. Use two smooth pieces of wood to clamp the hull in your vise when tapering the blank

or drilling the necessary holes.

You will need a strip of pine $\frac{3}{16}$ by $\frac{7}{8}$ by 11 in. long to make units B, C, D, E, G, J, and the turrets. It is easy to cut these out with a ruler and a razor blade. True them up afterward with a small sandpaper block. I found that a small tray in which to put the parts after



wood. The catapult tracks, derrick booms, and details marked P can be made quickly from safety-match sticks. Slice off a $\frac{1}{8}$ -in. strip of $\frac{1}{8}$ -in. pine 8 in. long for making the lifeboats, and note that there are two different lengths. These can be shaped with a blade and finished with fine sandpaper, but be sure to drill the davit holes in two of the short ones before doing the carving.



The finished hull block turned upside down, and most of the small parts. At left: Setting the main derrick support into the hull. The gun turrets, turret mounts, and masts also appear

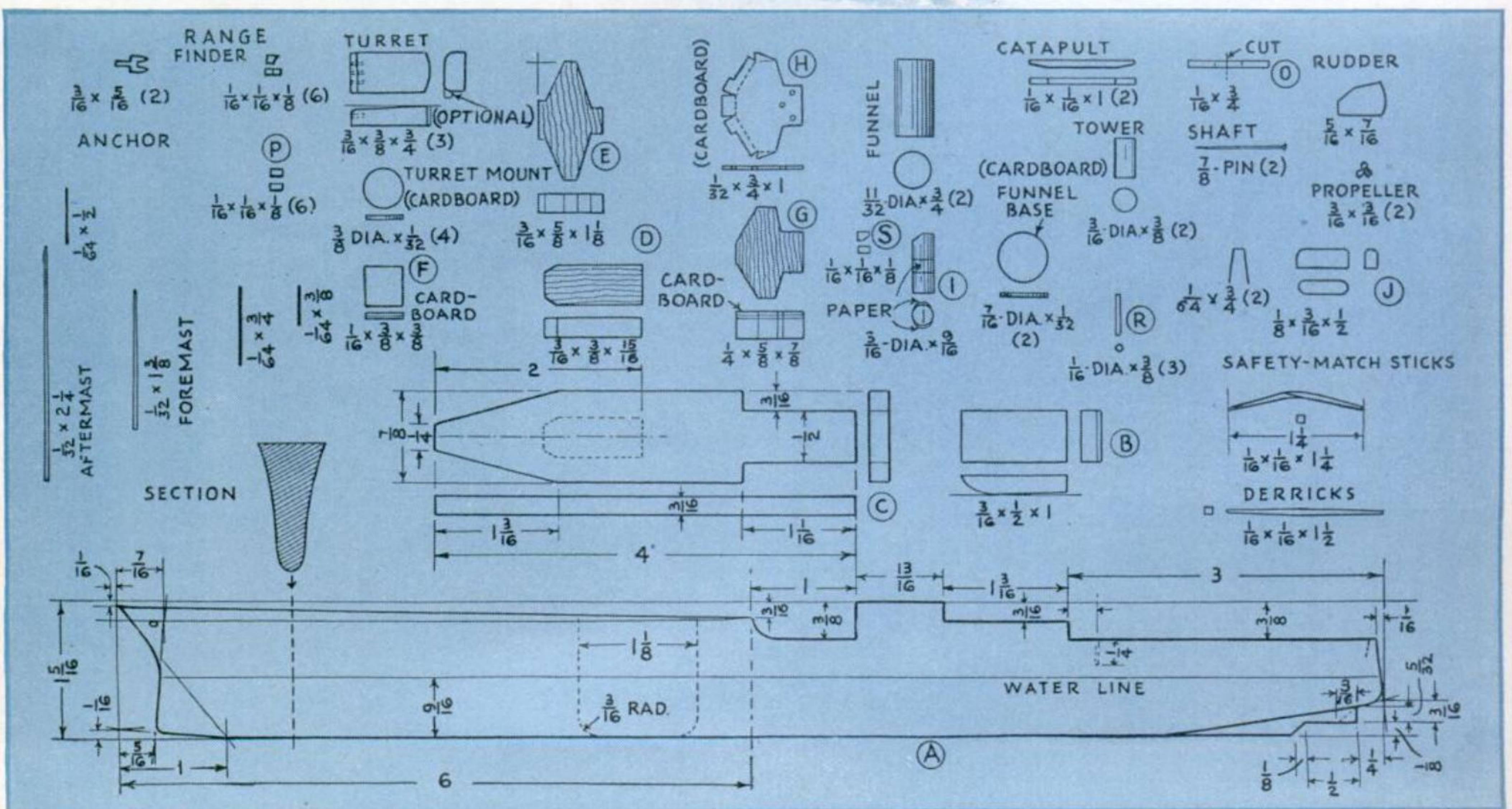
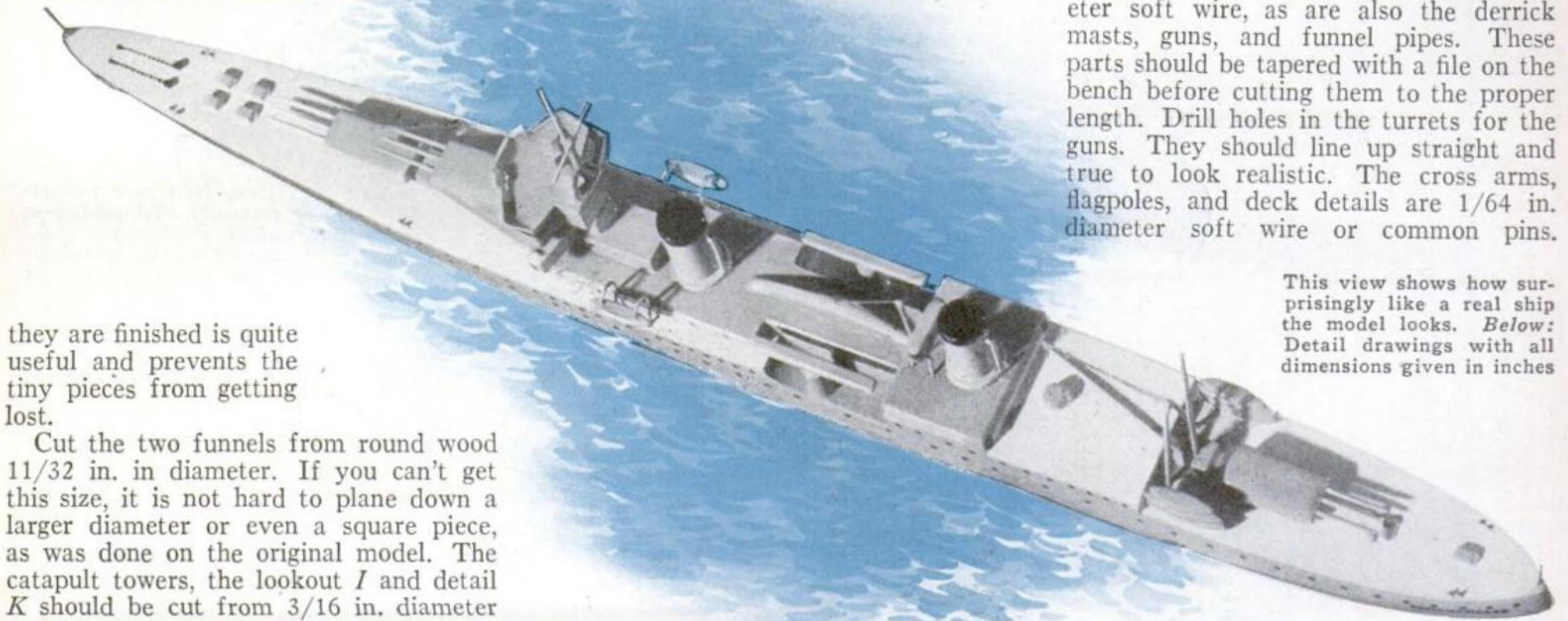
Cardboard is needed for the funnel bases, turret mounts, units H, F, and the top part of unit G. The band on unit I is made of paper, a glued strip of which is wrapped around two or three times. Detail S at the top of unit I is a bit of match stick. The supports for I should be $\frac{1}{16}$ in. diameter wire, the three pieces being set into holes in top of G.

The foremast is glued to the back of I. Both masts are made of $\frac{1}{32}$ in. diameter soft wire, as are also the derrick masts, guns, and funnel pipes. These parts should be tapered with a file on the bench before cutting them to the proper length. Drill holes in the turrets for the guns. They should line up straight and true to look realistic. The cross arms, flagpoles, and deck details are $\frac{1}{64}$ in. diameter soft wire or common pins.

they are finished is quite useful and prevents the tiny pieces from getting lost.

Cut the two funnels from round wood $\frac{11}{32}$ in. in diameter. If you can't get this size, it is not hard to plane down a larger diameter or even a square piece, as was done on the original model. The catapult towers, the lookout I and detail K should be cut from $\frac{3}{16}$ in. diameter

This view shows how surprisingly like a real ship the model looks. Below: Detail drawings with all dimensions given in inches



List of Materials

Dimensions	No. Pc.	Material
$1\frac{1}{8} \times 1\frac{5}{16} \times 12$	1	White pine for <i>A</i>
$3/16 \times 7/8 \times 11$	1	White pine for deck units <i>B, C, D, E, G, J,</i> and turrets
$1/8 \times 1/8 \times 8$	1	White pine for life-boats
$11/32$ dia. $\times 2\frac{1}{2}$	1	White pine for funnels
$3/16$ dia. $\times 2$	1	White pine for towers, <i>I,</i> and <i>K</i>
$1/32 \times 1 \times 1\frac{7}{8}$	1	Sheet metal for rudder, propellers, shaft braces, and anchors
$1/32 \times 1\frac{1}{4} \times 6$	1	Cardboard for funnel bases, turret mounts <i>F</i> and <i>H,</i> and top of <i>G</i>
$1/16$ dia. $\times 2$	1	Soft wire for <i>R</i>
$1/32$ dia. $\times 10$	2	Soft wire for masts, derricks, guns, and funnel pipes
$1/16$ dia. $\times 10$	1	Soft wire for davits, cross arms, and flag-poles

Common pins, safety-match sticks, and thread. Small cans or tubes of enamel (or paint) in navy gray, black, and buff. *Note:* All dimensions are given in inches.

Use thin aluminum or other sheet metal from which to cut the anchors, rudder, propellers, and shaft braces. This work is the only part of the task which calls for extreme patience, but it can be done without much trouble. Mark out the parts with a scratch awl, drill holes, and saw out roughly with a fine-toothed coping saw or jeweler's saw. Then finish the parts with a fine file. Two pins serve for propeller shafts. The braces are pushed into slots in the hull. The propellers will be held in place by the paint, and this and a little glue will hold the rudder securely.

All the wood and cardboard parts should be fastened with casein glue or a good household cement. Most of the metal parts are set into holes which are deep enough to hold them rigid.

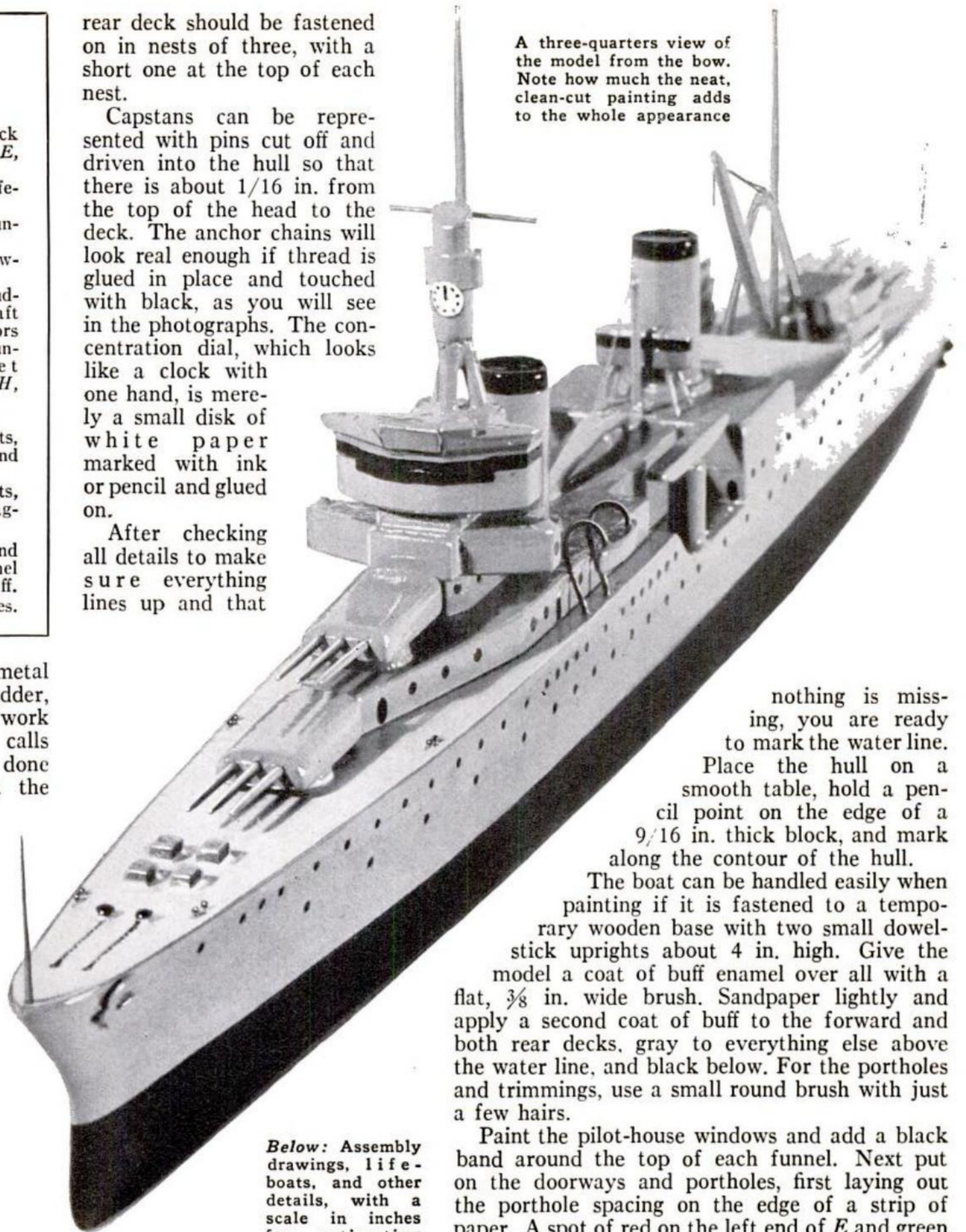
The forward lifeboat davits can be bent from the rounded ends of small hairpins. The boats on the

rear deck should be fastened on in nests of three, with a short one at the top of each nest.

Capstans can be represented with pins cut off and driven into the hull so that there is about $1/16$ in. from the top of the head to the deck. The anchor chains will look real enough if thread is glued in place and touched with black, as you will see in the photographs. The concentration dial, which looks like a clock with one hand, is merely a small disk of white paper marked with ink or pencil and glued on.

After checking all details to make sure everything lines up and that

A three-quarters view of the model from the bow. Note how much the neat, clean-cut painting adds to the whole appearance



Below: Assembly drawings, life-boats, and other details, with a scale in inches for estimating any dimensions

nothing is missing, you are ready to mark the water line.

Place the hull on a smooth table, hold a pencil point on the edge of a $9/16$ in. thick block, and mark along the contour of the hull.

The boat can be handled easily when painting if it is fastened to a temporary wooden base with two small dowel-stick uprights about 4 in. high. Give the model a coat of buff enamel over all with a flat, $3/8$ in. wide brush. Sandpaper lightly and apply a second coat of buff to the forward and both rear decks, gray to everything else above the water line, and black below. For the portholes and trimmings, use a small round brush with just a few hairs.

Paint the pilot-house windows and add a black band around the top of each funnel. Next put on the doorways and portholes, first laying out the porthole spacing on the edge of a strip of paper. A spot of red on the left end of *E* and green on the right side serve as lights.

