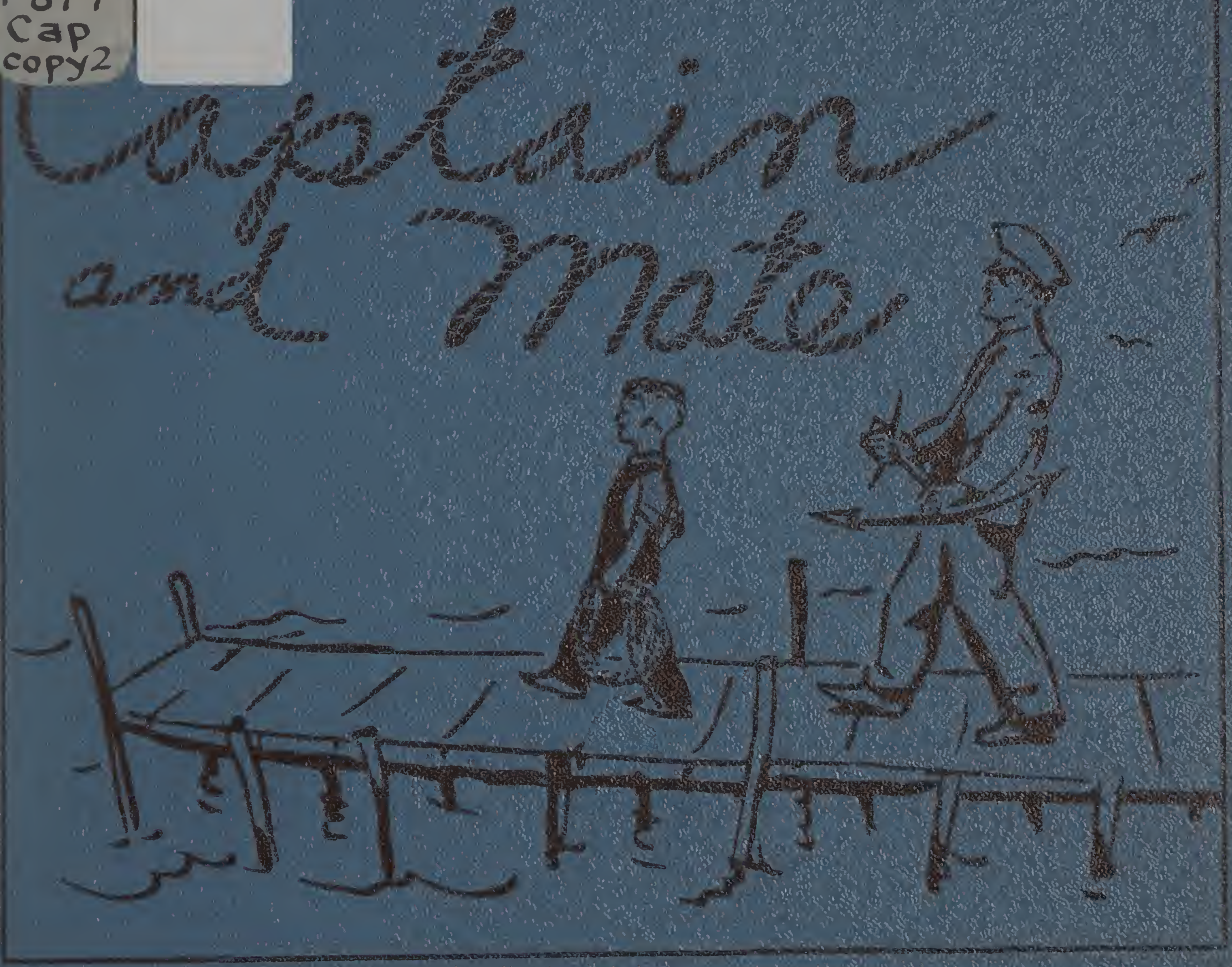
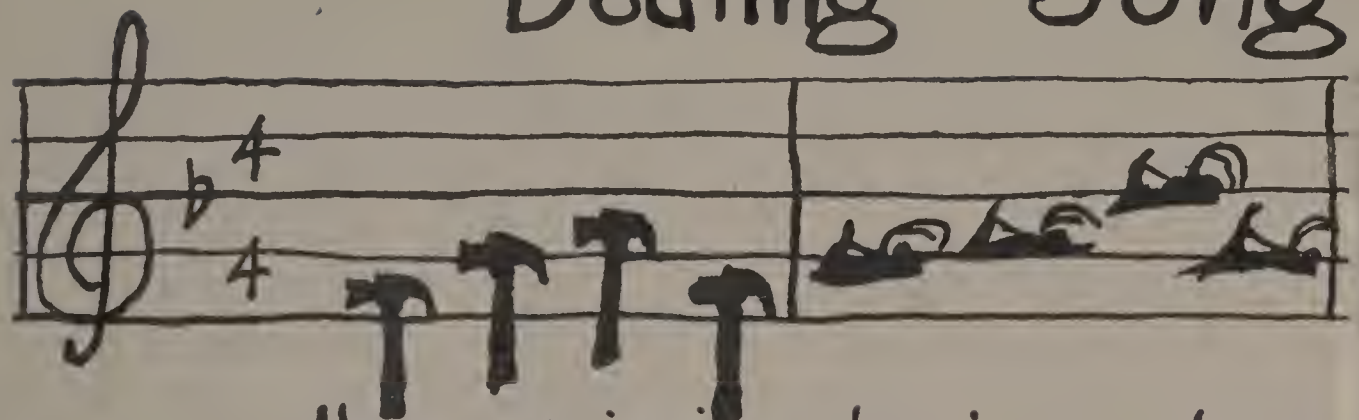
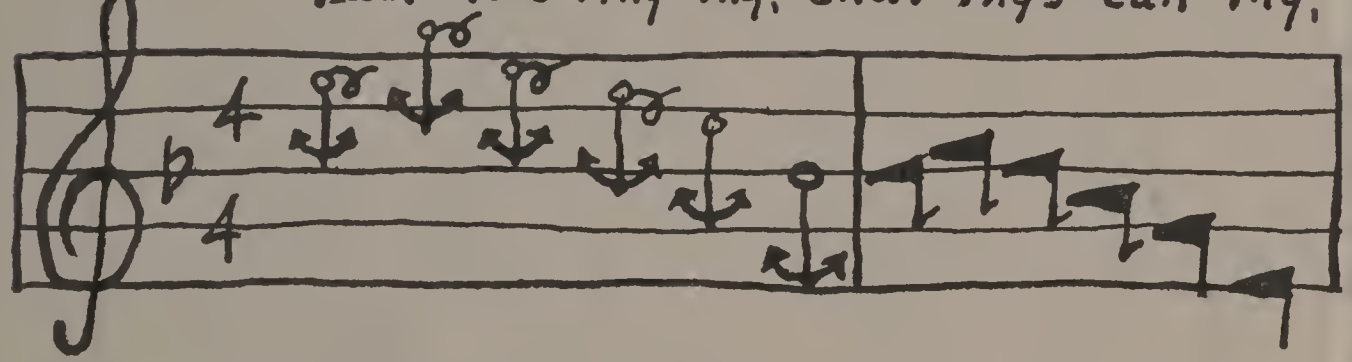
Confederation and Expansion



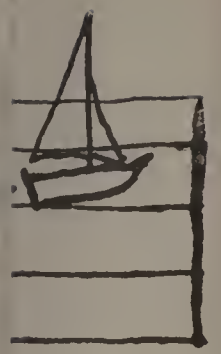
Boating Song

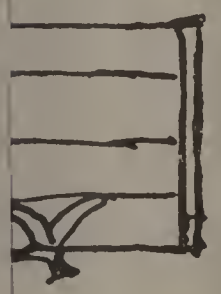


Ham-mers ring-ing, shav-ings curl-ing,

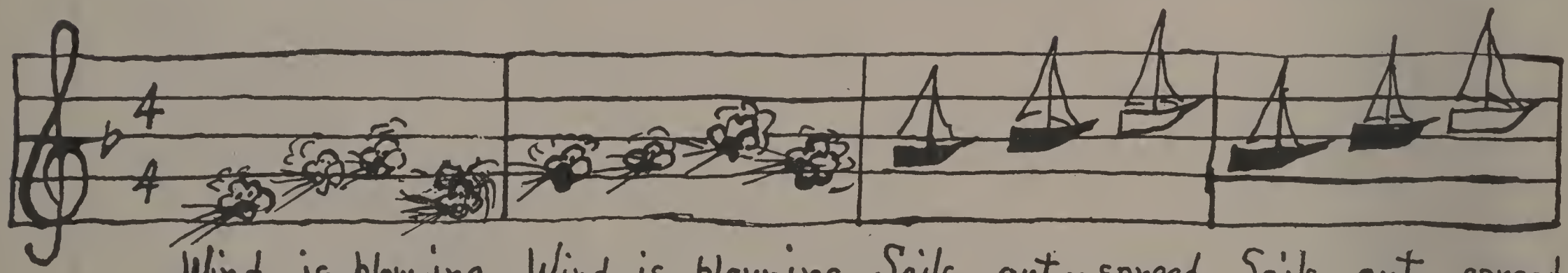


built.

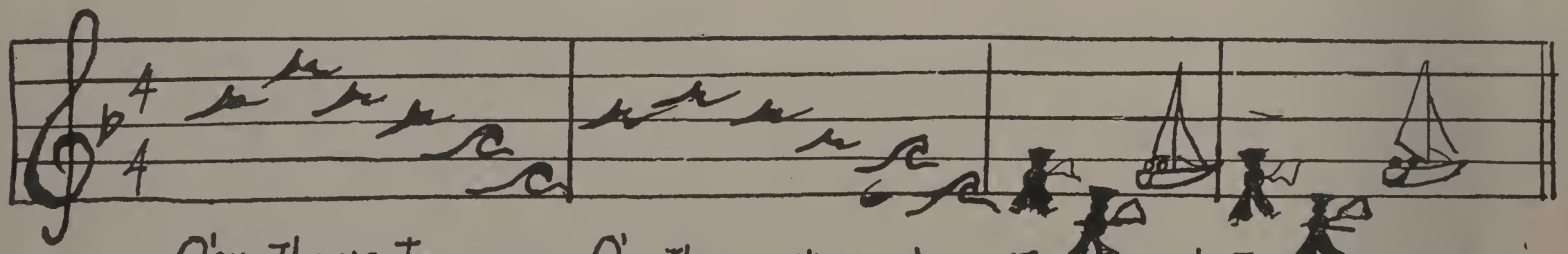




Stur-dy staunch and sta-ble. Fast and safe and a-ble, [illegible] Gull.



Wind is blow-ing. Wind is blow-ing. Sails out-spread Sails out-spread.



O'er The wa-ter go-ing. O'er The wa-ter go-ing. Fare-well all. Fare-well all.


SEA GULL

CAPTAIN AND MATE

By

(St. John)

Mrs. RUTH and HARROP A. FREEMAN

Pictures By

ROBERT N. BLAIR

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CHICAGO ILLINOIS

1940

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CAPTAIN AND MATE

FOR months Father had been reading about boats. He planned to have a boat built to use for our vacation. He chose a sailboat with a cabin. Father hired an old shipbuilder to build the boat.

One day Father said, "Come, we shall go to the shipyard. Today the shipbuilder will start to build our boat. You may watch him."

"That will be fun. Maybe I can help him sometimes. What is his name? I liked Chips, who built our house."

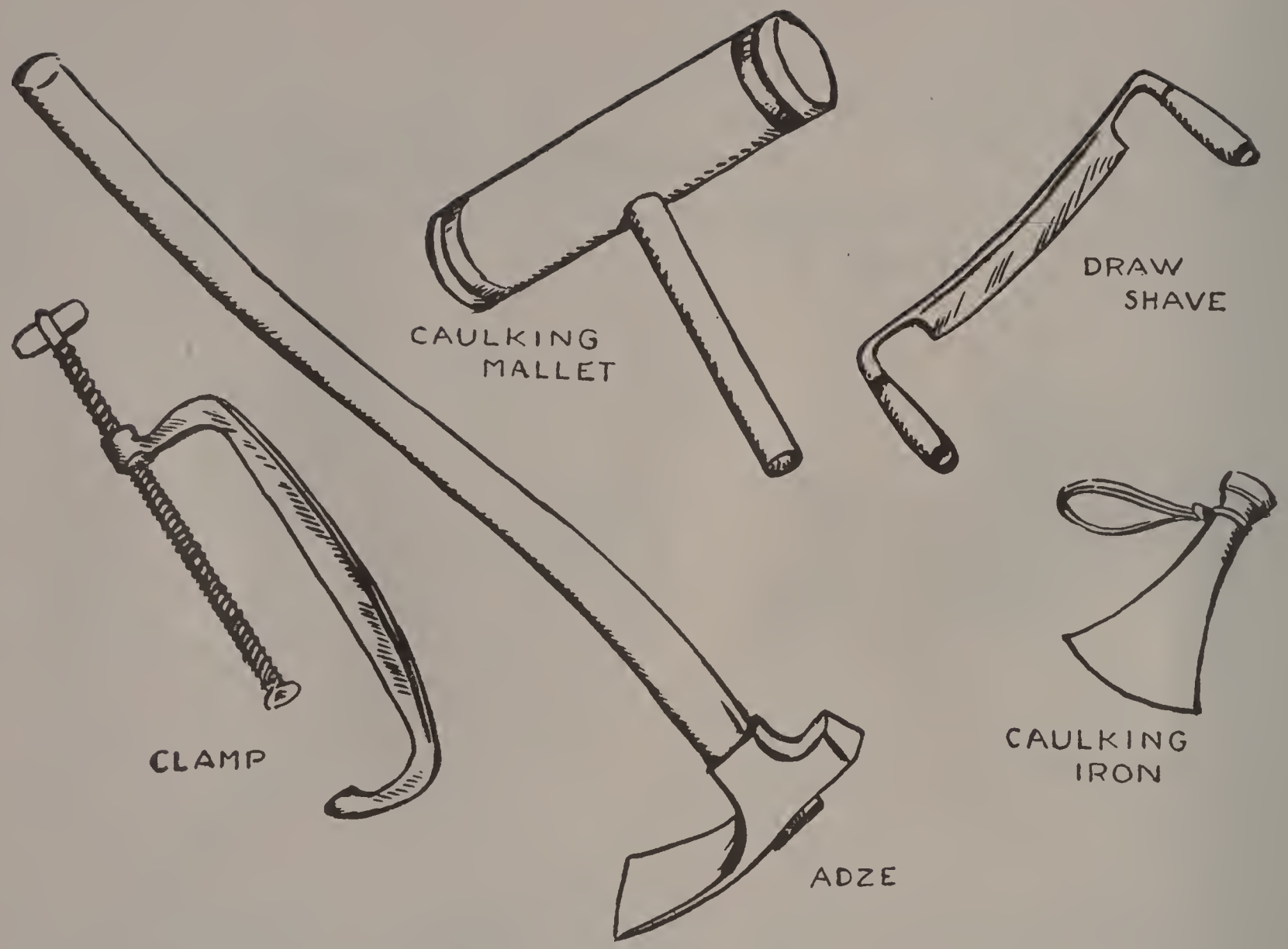
"Captain Harrington is his name. He likes to be called Captain. He used to be the captain of a tugboat. Come, we shall go meet him."

When we came to the shipyard, Captain was standing on the dock. His hair was white. His face was tanned. He had a pleasant smile.

Father introduced me to Captain. Captain looked at me and said, "Is this young man to help me? We shall call him Mate. A mate is the captain's chief helper. He can watch me and help me. He will learn how boats are built. He can make a ship model."

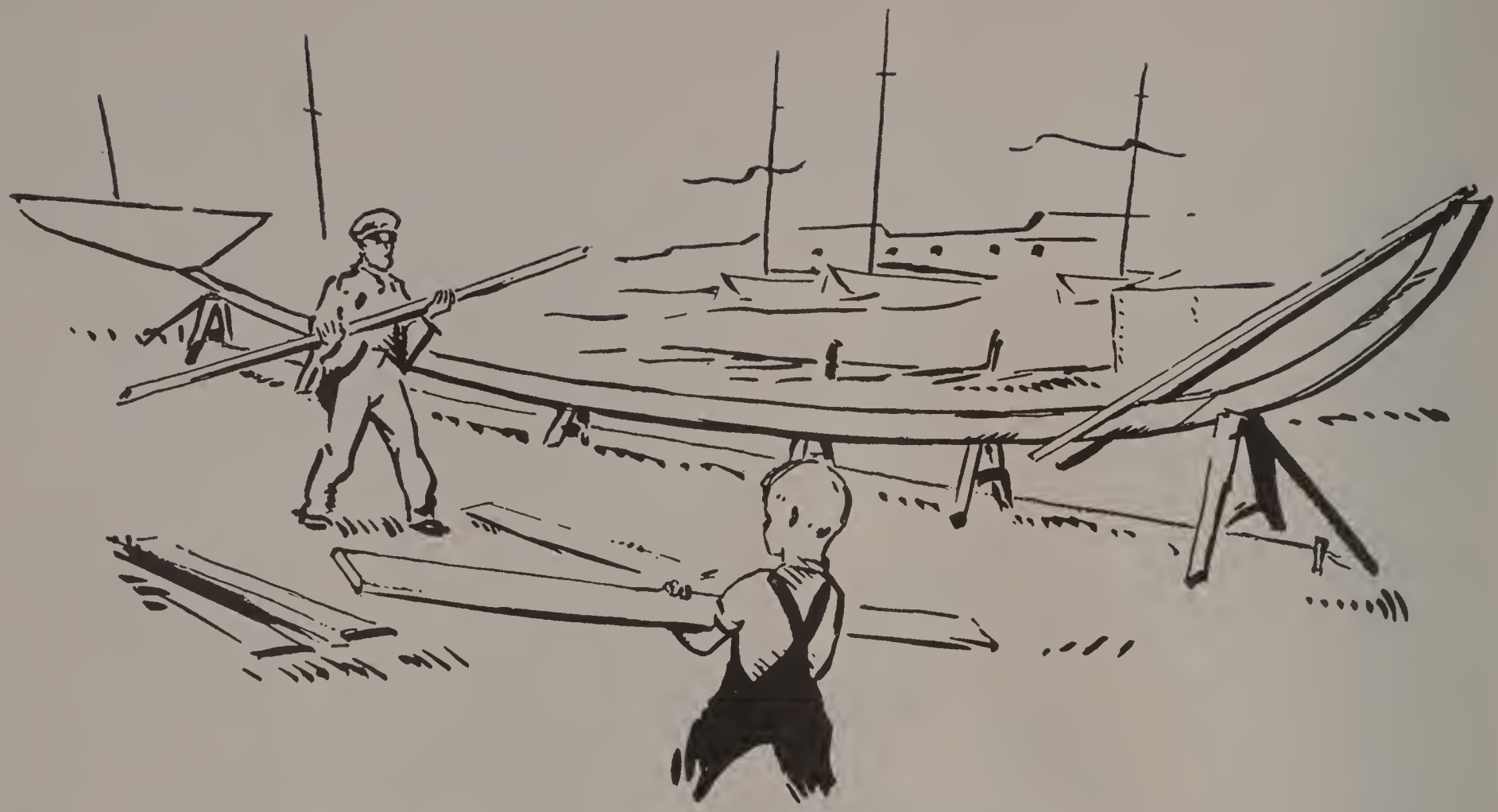
Captain examined the plans. There were plans of the outside of the boat and plans of the inside. The plans showed a cabin built like a small house. They showed the exact size of each part of the boat and of the sails. "That will be a fine, staunch, and seaworthy boat," he said, "it has good lines and we will use the best materials."

He drew Mate a set of plans for the ship model. The ship model was thirty inches long. It had large sails and a small cabin.



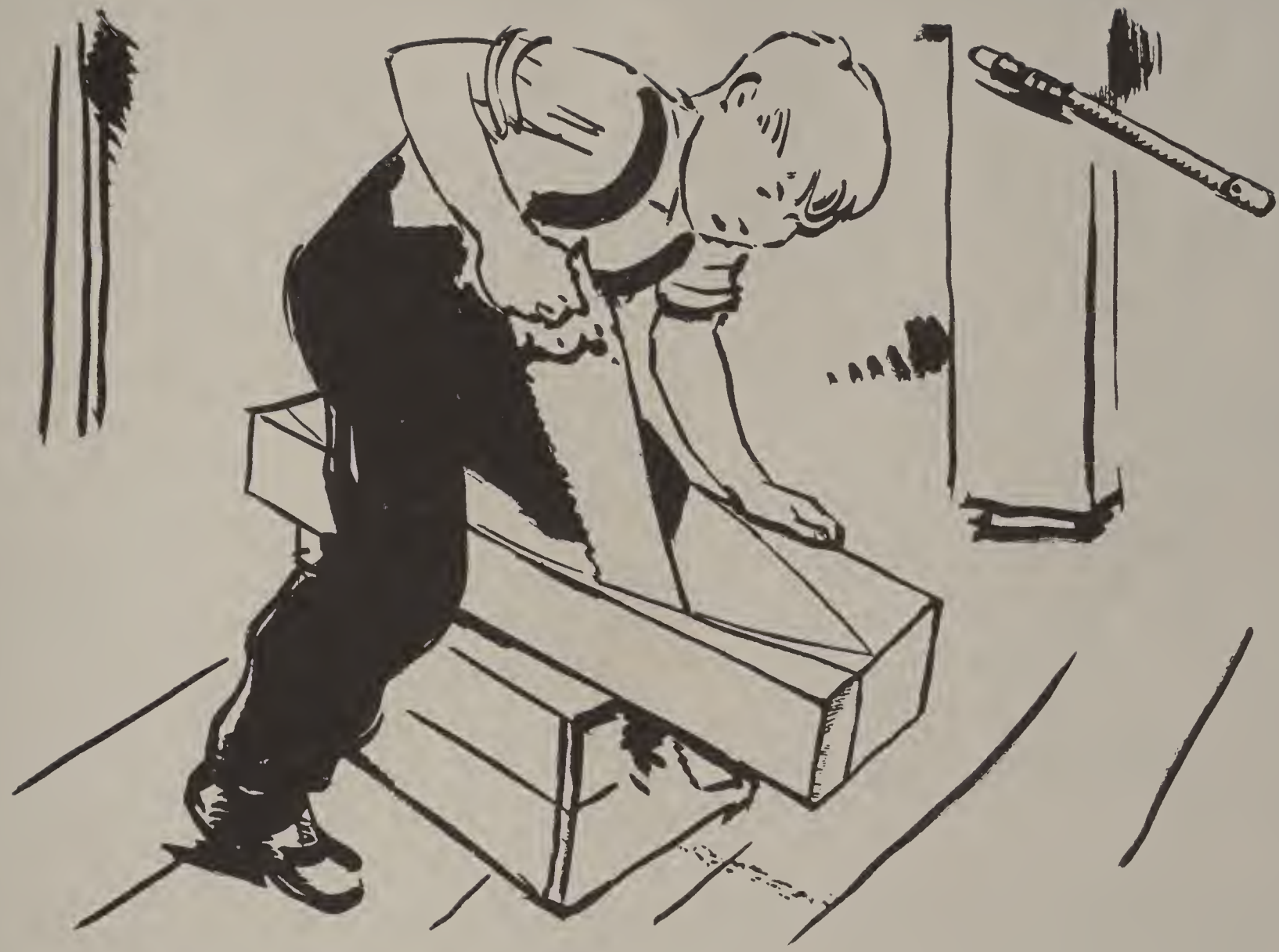
Captain showed Mate the tools he would use. They were different from carpenter's tools. In ship building, Captain would not use a level or a square. He must judge curves by his eye. He would use clamps to bend the wood.

Mate could use his saw and hammer. He could use his chisel and plane. He could use a jackknife. Father had bought him a new jackknife. He was proud of it. Father also had given him a small paint brush.

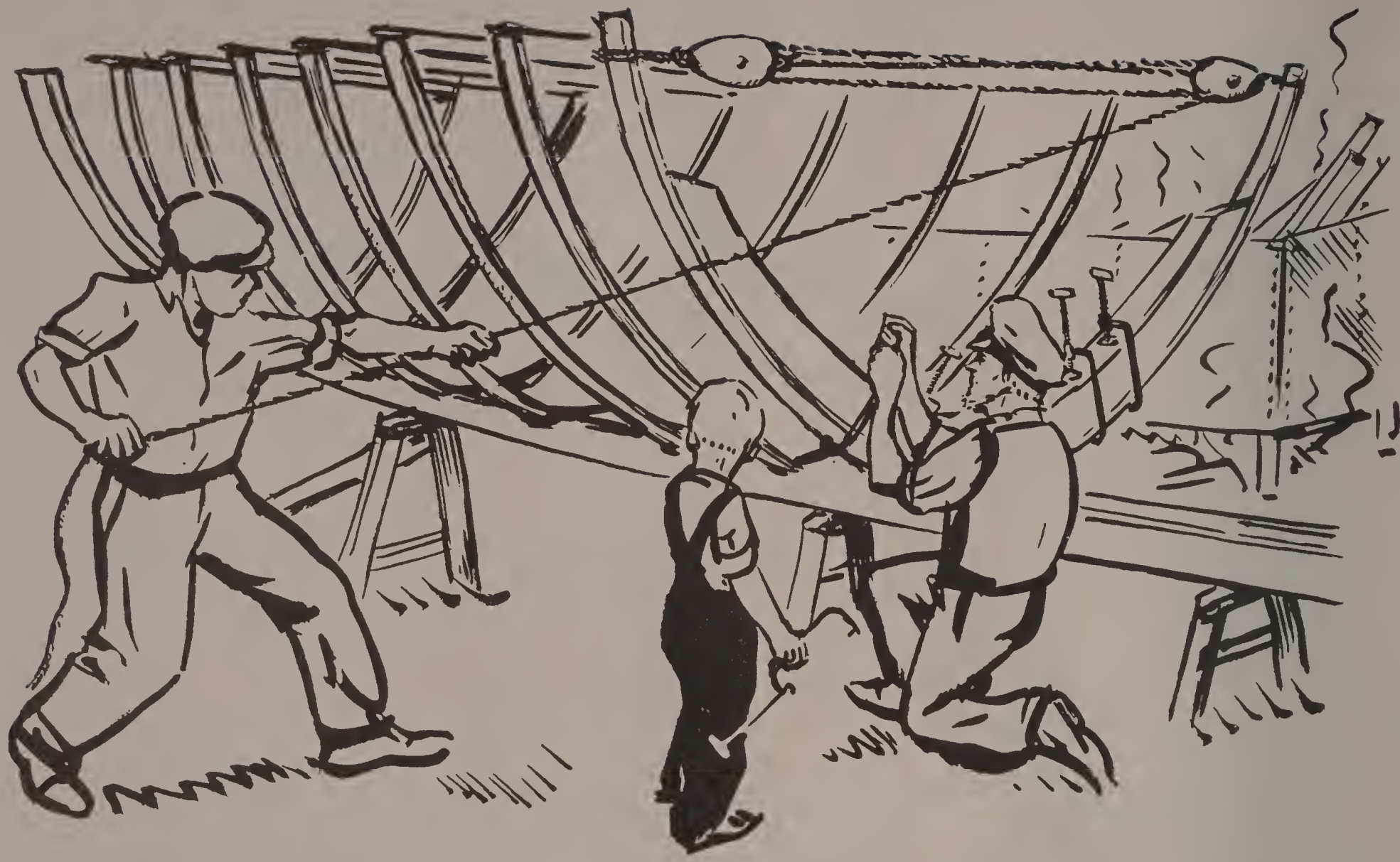


A shipbuilder first lays out the lines of the boat on heavy paper. Each piece of wood is checked on the plan. A boat is built from a center line. It must exactly balance.

The parts of a boat have different names. The KEEL is the foundation or backbone of the boat. It is made of oak. The curve at the fore part of the keel is the STEM. The front is the BOW, or FORE. The back is the STERN, or AFT. The piece across the keel at the stern is the TRANSOM.



Captain gave Mate a block of soft wood. It was thirty inches long, six inches wide, and four inches thick. Captain drew a line on the block to show the shape of the ship model. Mate sawed around the line.

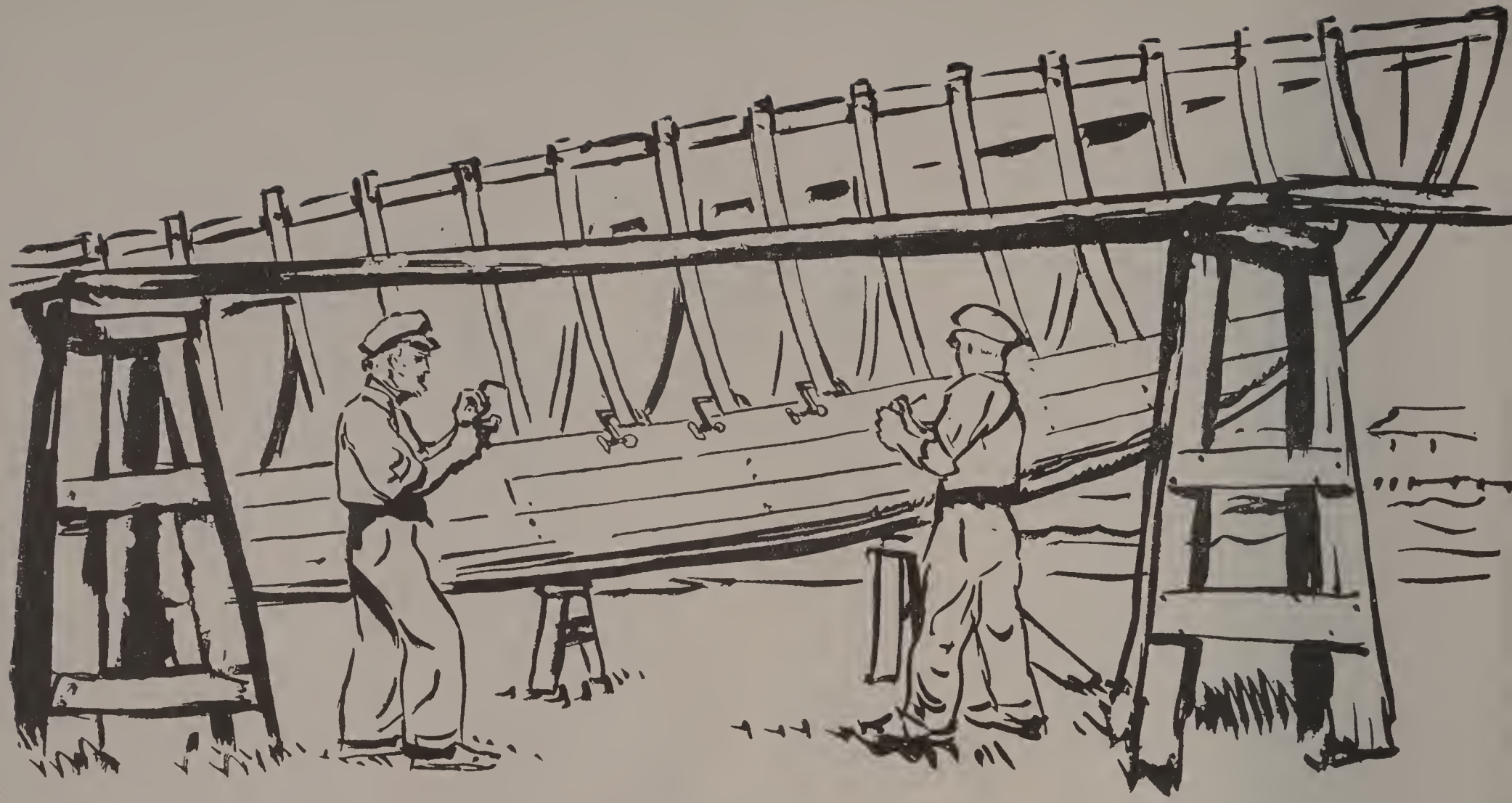


Overnight, Captain soaked pieces of oak for the ribs, in a vat of boiling water. This makes the wood wet and soft so it would bend easily. Captain and his helper bent the ribs in place. They fastened the ribs to the keel by screws. Mate held the screws for Captain. When the wood was dry, it would stay bent.

The part of the boat that floats in the water is called the HULL. Mate used his plane to shape the hull of his boat. He also used his jackknife. He knew the boat must balance in the water. He was careful to plane both sides of the hull the same.

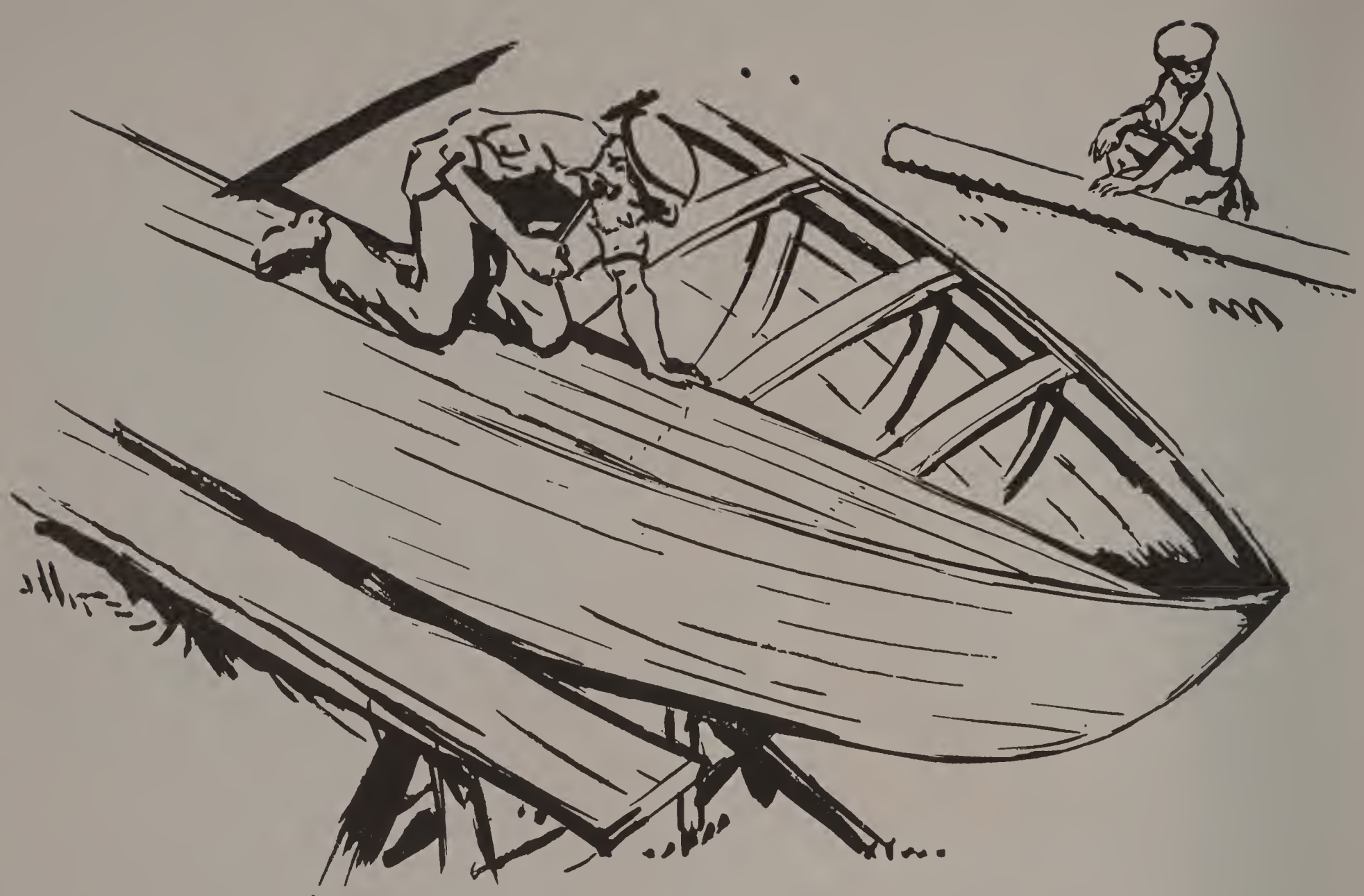
Captain and his helpers bent a heavy piece of wood along the ends of the ribs. This is called the SHEER. Each rib was fastened to the sheer. Captain bolted several long boards to the inside of the ribs. He also bolted a heavy beam on top of the keel. It held the ribs secure and strengthened the boat. Then they began to plank the boat. Each plank must be shaped to fit exactly.

Mate finished shaping the outside of the hull. He used his chisel to hollow out the inside. He smoothed the inside with his jackknife. He left the part at each end of the boat solid.



Boat builders start with the plank next to the keel. It is called the GARBOARD PLANK. Each plank is held securely in place by clamps and then is screwed or riveted to each rib. A plank is first put on the right or STARBOARD side. Then a plank is put on the left or PORT side. Each plank is fitted close to the next one with a fine crack between. Caulking, which is like string, is forced into the crack. Over it white lead is spread.

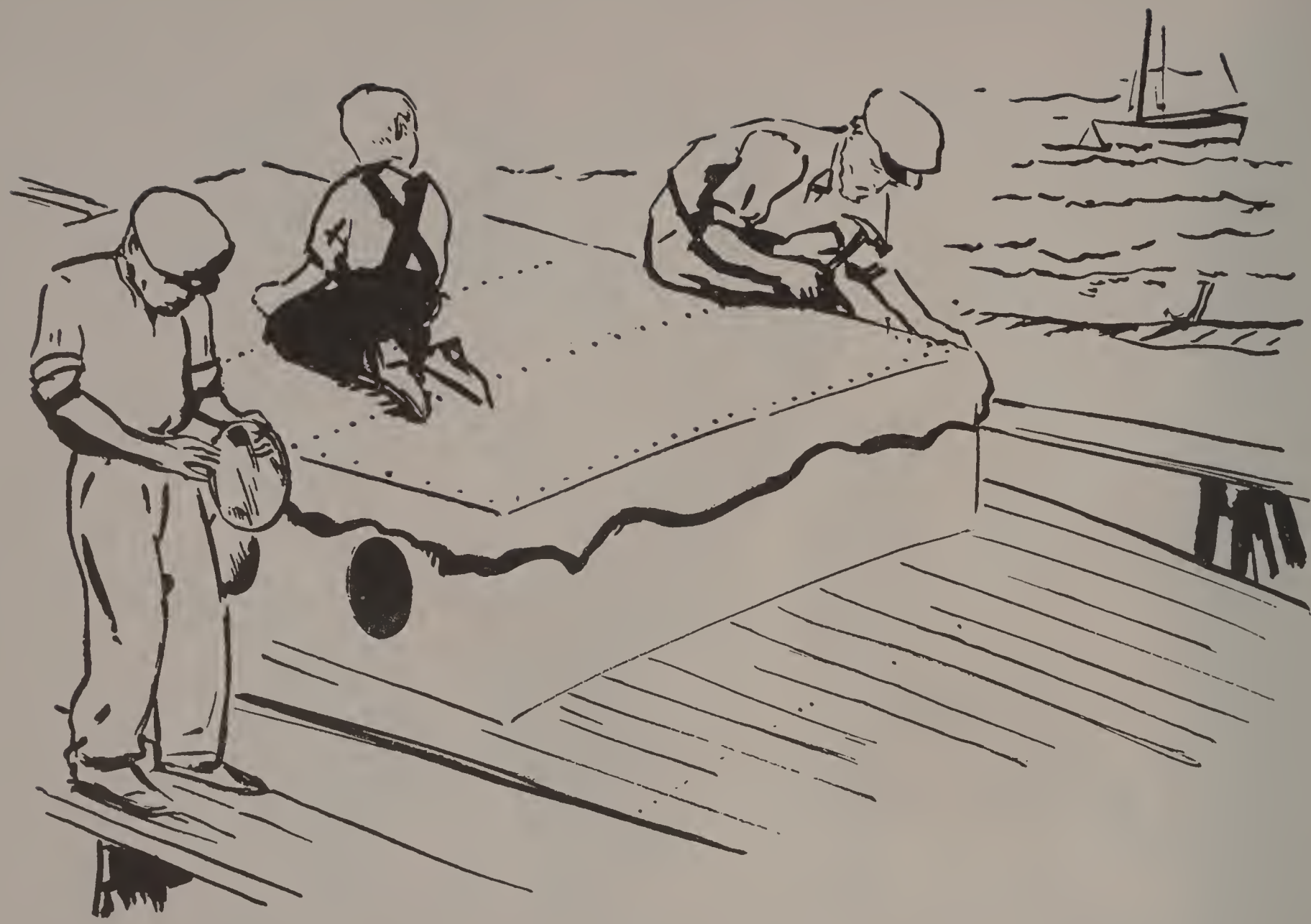
Mate saw the large lead KEEL for the big boat. This large piece of lead balances the sails and keeps a boat from tipping over. Mate used an old pair of shears to cut a keel out of tin for his ship model. He used his jackknife to cut a slot for the keel in his boat. He pounded the keel into the slot.



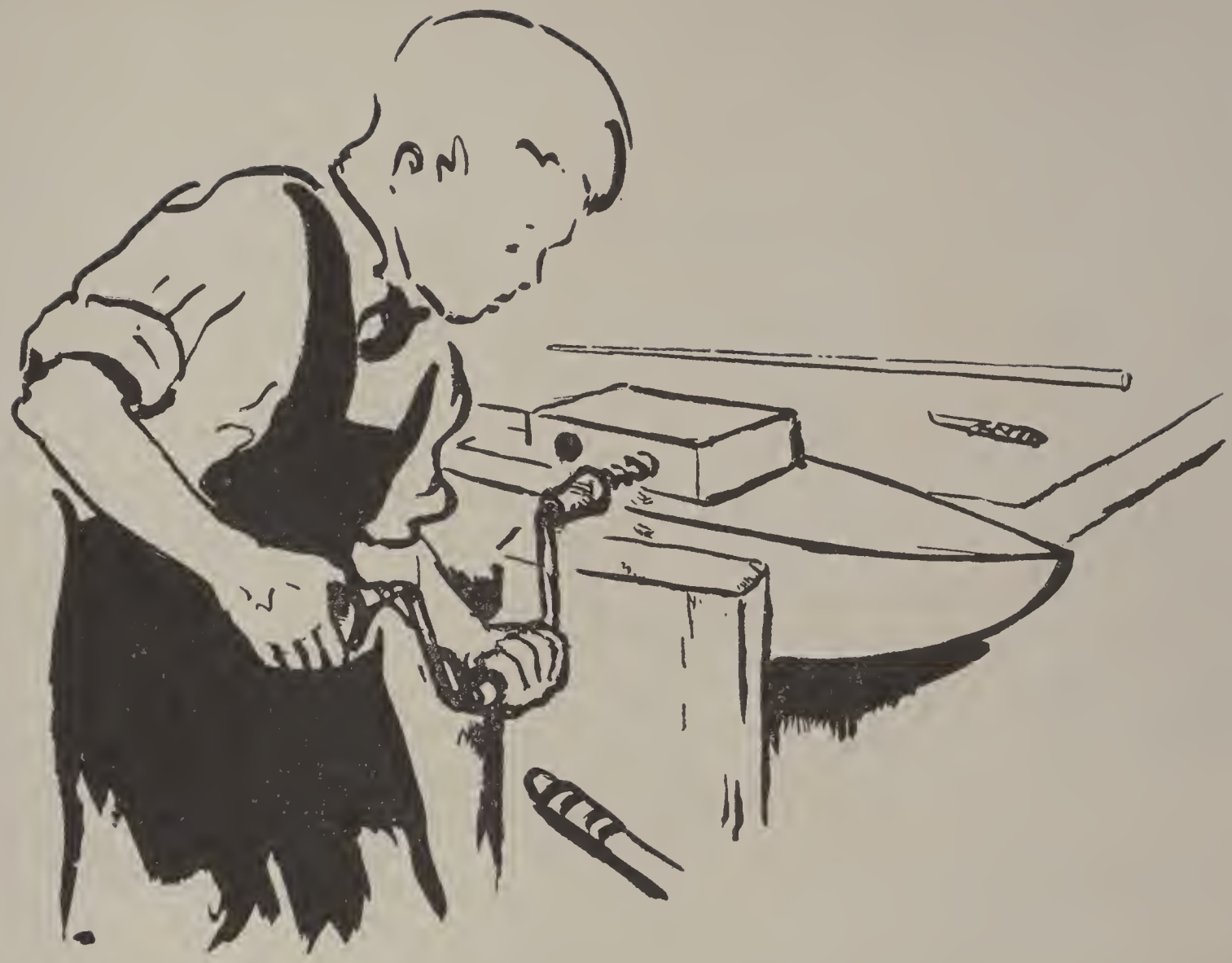
The deck of a boat is both a floor and a roof. Before it could be laid, deck beams had to be bolted to the ribs. These deck beams were curved so that water would run off. The deck boards were nailed down over these beams.

While Captain was nailing down the deck, one of his helpers shaped the boat's mast. It was a long spruce pole.

The solid parts at the bow and stern of Mate's boat were decks. Mate used for his mast a round stick, about one-half the size of a broom handle. He shaped it with his jack-knife so that it was small at the top and grew larger at the bottom.



It was now time to build the cabin. Even as far above the water as the cabin, each joint must be watertight. In place of windows, round PORTHOLES were used. The cabin top was covered with thin boards. On top of these boards canvas was glued. Mate helped the workman glue and tack down the canvas.



Mate hollowed out a block of wood with his chisel. It looked like a small box. The Mate bored two holes on each side with his brace and bit. He pasted cellophane over the inside of these holes. The box was nailed upside down over the part of the hull that had been dug out. Mate had a cabin with four portholes.

Next time Mate came to the shipyard there was a ringing sound like many hammers striking a bell. Mate found Captain and his helpers caulking the boat. A long thread of candlewicking was pressed into each seam. Then this was driven in with a caulking iron and mallet until the seam was almost filled. Over this, white lead was spread until the seam was full.

Mate did not have to caulk his ship model. But he did fill the small cracks and screw holes with white lead so that the surface would be ready for painting. He used a piece of fine sandpaper to make the wood smooth.

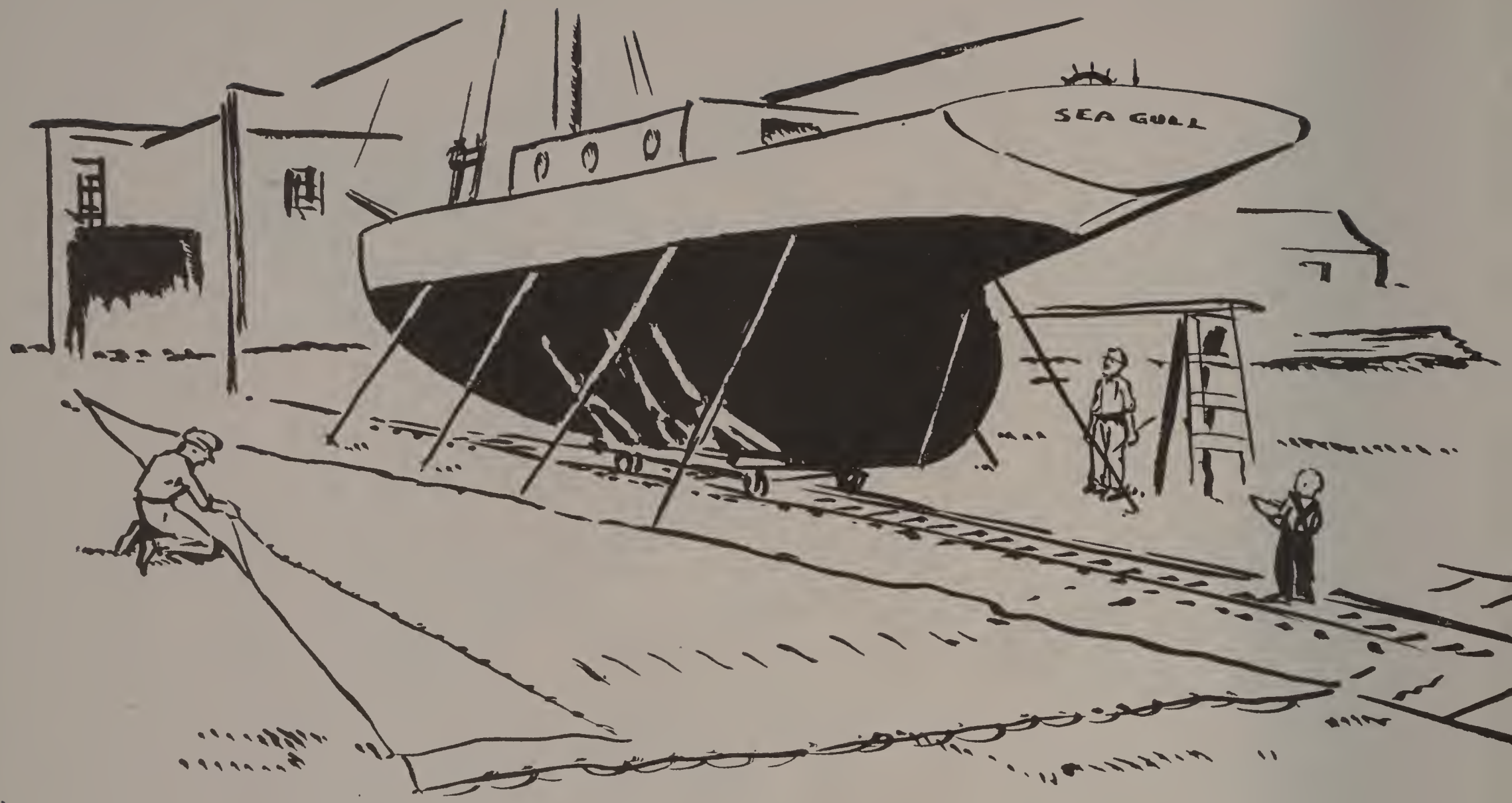
While the men sanded the outside of the hull, Captain began work on the inside. He laid the floor in the cabin and in the cockpit aft of the cabin. The cockpit is the inside of the hull not covered by a roof or deck. He built bunks in which to sleep, and a little galley, or kitchen. He built a toilet, and lockers in which to put clothes and food.

Mate fitted up the inside of his ship model with a small seat. He used a button for a steering wheel. He made an anchor from an old lead fishing sinker. He fitted a tin rudder to the stern so that he could make the model go straight or in a circle.

The painters began painting the hull. The part below the water was red. The topsides above the water were white. The deck was green. The cabin was varnished. Four coats of paint were spread on to make the boat waterproof and preserve the wood. The boat's name SEA GULL was painted on the side. Everyone said the boat was beautiful. Sailmakers had made sails for the boat.

Mate dipped his brushes into the same buckets as the painters. He painted his model white and green. Father said he got more paint on himself than on the boat.

The ship model was named PEE WEE. One of Captain's helpers painted this name on the model.



The large sail was called the MAINSAIL, and the small one the JIB. The mast was fitted with a long pole called a BOOM to hold the bottom of the sail in position. The mast was held straight by wires. The sails were spread out near the boat and fitted with ropes and mast rings. The large lead keel was now bolted to the bottom of the boat.

When Mate had time to fit out his ship model, he set up his round mast with wires to keep it up. He made a sail from an old handkerchief. He used string instead of rope. He used little screw eyes in place of pulleys and fittings.

The boat was fitted with ropes, anchors, running lights, fire extinguishers, dishes, and many other things.

A week later there was a day of celebration. The boats were to be launched. Mother christened the sailboat. It slipped slowly down the marine railway into the water. Mate, Mother and Father ate their first meal aboard.

Father had bought a little rowboat on which to go from the shore to the sailboat. Father and Captain lowered it into the water. Mate put his ship model into the water. He tried it out by pulling it behind the rowboat. Mate had to add a little more weight to his tin keel.

Captain took Mate on his lap. "Sonny, always remember that a ship is beautiful. That is why we call a boat 'she.'

"Tomorrow we will raise the sails and glide off down the lake. I will sail the SEA GULL. You will sit in the rowboat no longer merely mate, but the captain of your own boat. And PEE WEE will come following after."


SEA GULL

Boating Song