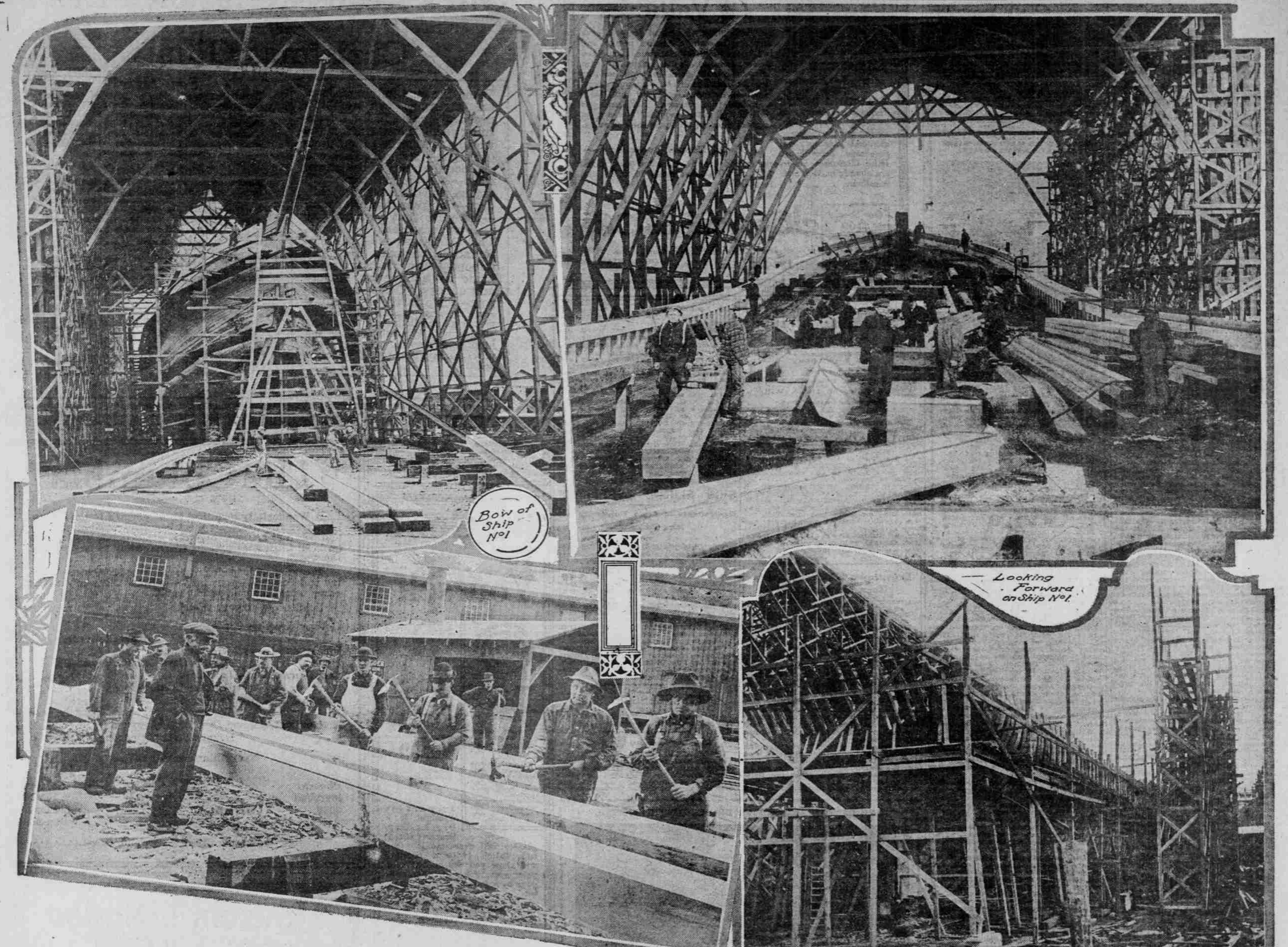


# SPIRIT OF FOREST LURKS IN BUILDING OF WOODEN SHIPS

Huge Timbers Are Shaped Adroitly by Accurate Handling of Simple Tools—Furnishing of Knees for Re-enforcement of Hull Proves to Be Industry in Itself.



Bow of Ship No. 1

Looking Forward on Ship No. 1

Hewing of Large Timbers

Stern of Ship No. 2

**I**N THE building of wooden vessels, Portland and other cities of the Pacific Coast have returned to an industry that the New England forefathers early turned their hand to, but which has been a dead industry locally for years, despite the abundance of raw material all along the Columbia River.

In the building of steel ships, the processes of shaping and punching the rolled steel are lengthy and tedious. For the construction of wooden vessels a double band saw, a ship adze and an auger seem to be the principal tools necessary.

At any of the several shipbuilding plants along the Columbia River where wooden vessels are being turned out at the rate of one per set of ways every four months, the steady hammering of the calker, the rat-tat-tat of the pneumatic hammer driving bolts, and the confusion of sounds from a dozen or more adzes as they bite healthy chips from the fast-shaping timber, are all characteristic sounds.

timbers are much smaller, although of extraordinary tensile and compressive strength.

A few of the timbers that cannot be easily shaped with mechanical means are set upon by a band of busy and efficient men, brawny-armed and true of aim, and the timber is soon cut into its proper size and shaped with a score of adzes with blades of unusual sharpness. The welding of an adze is an art in itself.

Ship No. 1 at the yards of the Peninsula Shipbuilding Company is well under way, the second ship is being rapidly framed and workmen are preparing to erect a set of ways to receive the third ship. The ships are all the same size: 225 feet over all, 225 feet keel, 43 feet beam and 19 feet depth of hold.

Auxiliary Schooners in Building.

The first two ships that are now under way are classified as auxiliary

schooners. They are of Class A construction, have a gross tonnage of 1600 tons and a net tonnage of 200 tons less, a dead weight tonnage of 2600 tons and a cubic capacity of 123,489 feet.

They have a draught of 20 feet.

Their equipment will consist of one auxiliary boiler, with a working pressure of 150 pounds, a heating surface of 1100 feet, one furnace, one donkey boiler, four steam winches, one steam windlass, one steam capstan, and will be electrically lighted.

In one of the ships now under construction there are approximately 1,100,000 board feet of timber, with a valuation of \$25,000. The timbers are tree nailed with wedges on both ends and also spiked. All metal below the water line used to re-inforce the vessel's timbers are galvanized to protect them against rust, from salt water, in

one ship it is estimated that 10 tons of galvanized spikes and 40,000 tree nails are used.

**Donkeys Handle Timbers.**

All the timbers about the yards are handled with steam donkeys and cables. A revolving crane placed between the two ships being built distributes timber and other material to whatever part of the ship it is needed.

One of the most interesting of the features of wooden shipbuilding is the

appearance of hundreds of "knees" in the ship's interior. The knees are used for re-enforcement of timbers and to keep the timbers from becoming weak when the vessel bucks a heavy sea. The knees are made from the roots and part of the butts of big firs.

It is estimated that when the yard of the Peninsula Shipbuilding Company is in full swing and all their ways they will have a capacity of one ship

per pair of ways every four months. That means nine ships a year of the size now being built. The Peninsula Shipbuilding Company is only one of the many along the Columbia River that is building wooden ships.

The two ships being built will sell for approximately \$250,000 each. Yet in that ship is but little more than 1,000,000 feet of timber.

number of energetic men and rewards them with a good remuneration. One hundred and fifty "hanging" knees are used in one ship. It is apparent what industry is involved in getting enough knees to supply one shipyard.

**Work With Timber Pleasing.**

Then there is the smell of timber freshly cut, reminding one of impenetrable forests and logging camps where disease rarely stalks and where three "squaws," eight hours of healthful work and a few hours of recreation in the evening make up the day's activity.

Besides the odor of fir there is a smell of oakum that comes from where the calkers are busy. Steel shipbuilding may awe with the immensity of its involved labor, but real romance suggests itself where wooden vessels are under construction.

You have all been to the docks and smelled that odor of oakum and salt water that a wooden vessel alone excites—the odor of an open sea and the ports of the entire world. That is the odor that emanates from a plant where wooden ships alone are under construction.

In the yards of the Peninsula Shipbuilding Company, one of the many lumber companies that are building wooden vessels, is seen the evolution of the wooden ship. Strung around the yards are timbers of all sizes fresh from the mill. A boom of logs in the river is waiting to be hauled up the logway, laid hold of by "niggers" and roughly shaped by circular saws.

**Big Timbers Used in Keel.**

The largest of the timbers seen about the yards are used for the keel of the ship. They range from 100 feet to 106 feet in length and are 20 inches by 24 inches, breadth and thickness. One of these timbers, about which the rest of the ship is built, weighs approximately four tons.

The timbers for the skeleton of the ship are cut into the proper circular shape with a double-band saw. These

**WOMAN PUTS CAREER BEFORE LOVE AND FAILS IN SUCCESS**

Artist Refuses to Give Up Her Work for Home and Rejects Man She Loves to Climb Ladder of Fame.

BY MARY INEZ MARTIN.

**T**HIS is the story of a success that failed—a great success that was a great failure, and heaven only knows how many successes there are that leave the bitterness of ashes! Then comes the burning question, "What is wrong?" But the answer lies too deep to be applied to the present-day problem; back, back to the primal scheme of things lies the answer, so the cry must go on unanswered to the end.

Again the woman was the cause and again the woman reaped the bitter results. This man and woman sat under the towering pines as the day declined. Then the man threw his cap at the woman's feet. "Mary, I love you," he said, "will you be my wife?" Time out of mind the man has made this demand upon the woman since the days when he struck her in the head and dragged her unconscious off to his cave because he wanted her for his own, and for no better reason than that he wanted her he felt he was entitled to own her.

The woman made no answer, so the man went on: "I have not spoken before because I wanted to be able to offer you the kind of home you ought to have. I have worked hard, as you know, and won a fair measure of suc-

cess. It is all yours—will you come?" Looking the man squarely between the eyes, the woman answered: "But what of my own work?" The man sat up and looked at the girl in surprise. "Your work? Why, I don't propose to have you work any more. I want you to be just my wife."

Mary being a woman, felt the primal instinct of self-surrender surging in upon her senses. It would be sweet to fall into the arms of this strong man and say "Yes." This would be fulfilling the destiny of woman-kind, keeping the fires on the household altar aglow, bearing children to become useful links in the development of the scheme of things, to go on in their turn fulfilling their destiny in the same way. But the genius of the woman sprang up in revolt against this blind following of instinct. The contrast between the life this man offered her and her own ideals arose sharply before her. In calm, dispassionate tones she asked him again, "But what of my own work?" This time the man could not answer.

"You have your own work," the girl said in quiet, even tones, "the work you love. You will go on with your profession, broadening and growing each year until you reach your goal, and I will do the work I love and in which

I, too, have won a fair measure of success. If I marry you I must give it all up and be your homemaker and housekeeper, doing all the common, disagreeable things I most dislike. In marrying me you would give up nothing of your life. In marrying you I would have to give up all that's best of mine. Why should I?"

**Work Would Be Abandoned.**

"Why should you?" The man sued and protested. He argued for the normal sphere of woman, the protected life in the sacred confines of the home, the joys of parenthood and the duty of following out the natural order of things.

The woman listened quietly, admitting the truth of all he said, until he brought his argument back to the concrete "Will you?" But again she asked him, "Why should I?" The man did not listen so patiently to the woman as she made her plea.

"I do love you," she told him frankly; "you are very dear to me, but you do not understand how inseparable a part of me my work is. I would be only half myself without this great love for my work. In giving it up I would lay down the best side of myself. To be your wife and make you a happy home, with all the world impelling—which you would expect of me—would mean to me the giving up the very core and fiber of my life, the glory of the world of form and color, the joy of working out my inspirations, the winning of my recognition in the field of art, and, greatest of all, the knowledge that the work I do is good and that it is mine. Talent knows no sex. The mere fact that I am a woman does not demand from me the surrender of my individuality."

The man turned his eyes, brimming

with love and the longing to take her to his heart with that protecting care the normal man accords the woman of his choice, and the girl's troubled gray eyes met his squarely. "Do you have to cease to be a woman in becoming an artist?" he pleaded. "Could we not be a help to each other?"

"Would you be willing to live in a boarding-house until you are rich enough to have a competent housekeeper?" she questioned. "Would you be satisfied to start out together every morning, you turning off at your office and I to my studio, meeting again in the evening at our boarding-house steps or waiting for me while I utilize the last fading rays of my north-light exposure? Home-making is an all-engrossing profession of itself and a noble thing, but my art is as all-engrossing to me and I know I could not be both."

But even as she was speaking trying to admit the fairness of her plea for self-development, her hands strayed down to the thick, short locks beside her, and her fingers ached to caress his forehead with the love she could have poured out upon him.

**Victory Won at Last in Art.**

The man listened and realized her earnestness. He had said all that was in his heart and there was nothing more to do. Bending low over her he kissed her reverently upon the forehead. "This is for goodbye, then," he asked huskily. The girl nodded through her tears and watched the light of love fade out of her life with the man's retreating figure.

The giant pines became black and dark as soon as the sun dropped out of sight, the air was chilly as the glow of the soft Indian Summer day faded into a dull monotone of gray. At length

gathering up her easel and camp stool the girl walked slowly back to the hotel—alone.

But there is no way of mere humans circumventing the inexorable scheme of things. An exhibit of the work of notable artists was recently given under the direction of the directors of the Metropolitan Art Museum to help the Belgian orphans.

A little knot of critics was gathered around the work of an American woman who had spent years studying in the studios of the masters in the old world. A silence fell among them as a stately woman swept toward them. Her poise and the quiet strength of her countenance spoke of a hard, long struggle for the place she had won and a splendid victory. She was soon surrounded by an eager group of admirers and borne off in triumph, for the successful artist was the guest of honor of the evening.

**Woman Declared Vindicated.**

In front of one of her smallest canvases a man stood, lost in a flood of memories. The picture was a simple little study of giant pines catching marvellous lights and shadows in the glow of the sunset. And after having made the tour of the gallery he came again and stood before the picture. And again the artist herself passed, and paused. She was the first to recognize the man, and at her voice he turned, their eyes meeting in a long, searching gaze.

Without preliminaries, as in the old days, he said: "Mary, your work is wonderful, you have vindicated the position you took and won a great success. No one offers you more heartfelt congratulation than I."

But here he was interrupted by a tug at his elbow and an importunate little person begged, "Do come along, Dad. I am terribly tired of pictures."

"Hush, dear," the man turned to say, "come and meet your father's old friend."

The bright little face smiled up into the tired eyes of the woman as the man continued: "I would be glad to have you meet my wife. She could not come with me tonight, we have very recently lost our youngest child, the baby, and she does not—here the dust in the atmosphere, or something, made him pause an instant. But "Please come along, Daddy, dear," the child coaxed and the man allowed himself to be dragged away by the little grant after saying reverently: "God bless you, Mary, you must be a very proud and happy woman tonight."

Again the eyes of the artist followed the figure of the man in the tow of the dancing child. Lines of care and gray hairs told of a life of hard work not crowned with as great a success as had been hers. But through a mist that arose between her eyes and the sunlit study of giant pines she saw this man who worked, not for the mere getting of success, but for the growing needs of the child at his side. And as she watched this man whose heart had been torn by great sorrows and enriched by great joys, his last words still ringing in her ears, she asked herself again the question, "Why should I?"

**Drain Plant Nearly Ready.**

DRAIN, Or., Dec. 2.—(Special.)—The city has nearly completed the new substation of the city electric light plant. The old substation burned some time ago. The transformers are in place, but the new switch boards have not yet arrived.