

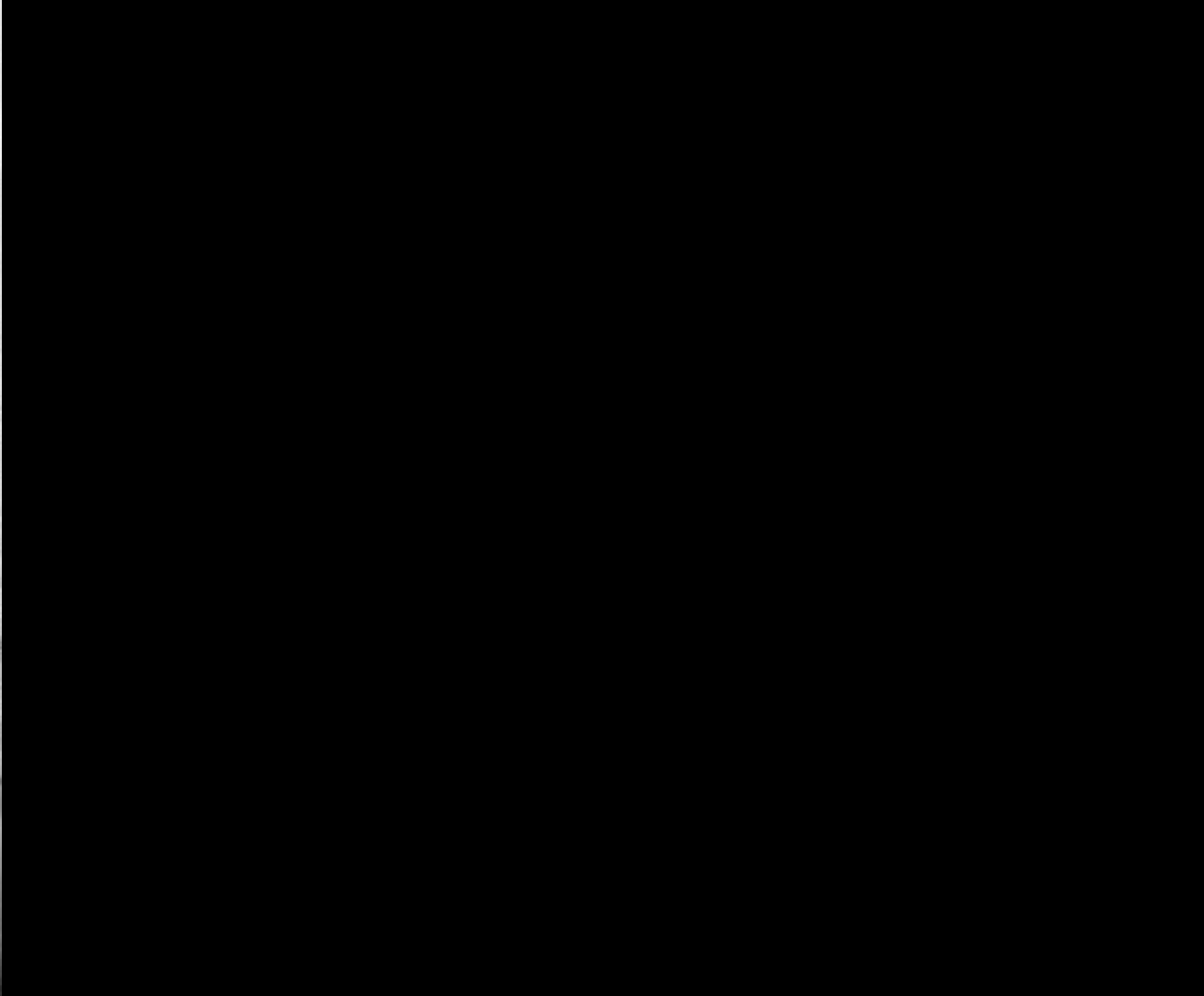
Building the Largest Wooden Schooner

Funding, Design, and Sea Trials



Christopher Timm
Curator of Exhibits







1907



EXPLANATION

● Base-load steam-electric plant

— Railway coal-delivery route

- - - Boat coal-delivery route

Available condensing water

Mining district

Bituminous-coal region

LOCATION OF PRINCIPAL COAL-DELIVERY ROUTES FROM BITUMINOUS MINING REGIONS TO BASE-LOAD STEAM ELECTRIC PLANTS IN 1930.

masters. (Incidentally, their yard is being restored by the Bath Marine Museum.) Like the much older Sewall yard, they managed the ships which they built.

At 3730 tons, the *Wyoming* was the largest wooden ship ever built in America, except for Donald McKay's unfortunate *Great Republic*. There was a limit, on account of the size of the trees, to the effective size of a vessel, and even with iron strapping there was a danger that their keels would "hog." With iron or steel, of course, there was no such limit—the steel-riven-master *Thomas W. Lawson* ran to 5212 tons but was a failure in the coal trade. In the early years of American shipbuilding, Maine could underbid the British because oak, pine, and other timber grew almost to the water's edge. That advantage had passed by 1830, and the Maine builders had to go considerable distances for their timber. The oak frames of the *Wyoming* came from Chesapeake Bay, her planking was of southern pine, and her masts and spars had to be brought by rail from Oregon. Timber transport was one reason why she cost \$190,000.

The Hampton Roads bituminous coal came up the coast 527 miles to Boston or 568 miles to Portland, the two chief receiving ports. Under normal circumstances, the voyage took three weeks—one week south-bound, one week loading, and one week returning northward. A six-master could carry about 5000 tons, at about 80 cents a ton. The crews were about 10% American, and the rest were German and Scandinavian. When desertions occurred in Hampton Roads, one could usually bail out replacements from the local jail; one skipper recounted that when the jailer said he had a likely Scandinavian, the sailor asked, "What's your ship, Captain?" "*Wyoming*." "Hell, I'd rather stay in jail."

Up to 1907 the coal schooners paid good dividends, and the business was flourishing. Percy and Small sought far and wide for capital—often reflected in the names of the vessels. One heavy western investor, in fact, got two ship names—the five-master *Governor Brooks* and one for his state *Wyoming*. Prosperity in the coal trade reached its peak in 1907 and then fell off sharply—the *Wyoming* did not come on the scene until the tide had turned. One hint of the new concern came from steam colliers. In 1907 the Sprague concern put three steamers on the run—the *Everett*, *Mulden*, and *Melrose*—named for north-side suburbs of Boston. Against this competition, the schooners had several advantages—cost of construction, fuel, and crew—about half the cost for steamers. But the steamers had still greater advantages. With their quicker loading and transit, they could make better than 40 voyages a year to 11 or 12 for the schooners. What was more, the port authorities in Hampton Roads often kept the schooners waiting while the steamers got in first to the berth. Profits under sail began to fall off, and it was only World War

masters. (Incidentally, their yard is being restored by the Bath Marine Museum.) Like the much older Sewall yard, they managed the ships which they built.

At 3730 tons, the *Wyoming* was the largest wooden ship ever built in America, except for Donald McKay's unfortunate *Great Republic*. There was a limit, on account of the size of the trees, to the effective size of a vessel, and even with iron strapping there was a danger that their keels would "hog." With iron or steel, of course, there was no such limit—the steel-riven-master *Thomas W. Lawson* ran to 5212 tons but was a failure in the coal trade. In the early years of American shipbuilding, Maine could underbid the British because oak, pine, and other timber grew almost to the water's edge. That advantage had passed by 1830, and the Maine builders had to go considerable distances for their timber. The oak frames of the *Wyoming* came from Chesapeake Bay, her planking was of southern pine, and her masts and spars had to be brought by rail from Oregon. Timber transport was one reason why she cost \$190,000.

The Hampton Roads bituminous coal came up the coast 527 miles to Boston or 568 miles to Portland, the two chief receiving ports. Under normal circumstances, the voyage took three weeks—one week south-bound, one week loading, and one week returning northward. A six-master could carry about 5000 tons, at about 80 cents a ton. The crews were about 10% American, and the rest were German and Scandinavian. When desertions occurred in Hampton Roads, one could usually bail out replacements from the local jail; one skipper recounted that when the jailer said he had a likely Scandinavian, the sailor asked, "What's your ship, Captain?" "*Wyoming*." "Hell, I'd rather stay in jail."

Up to 1907 the coal schooners paid good dividends, and the business was flourishing. Percy and Small sought far and wide for capital—often reflected in the names of the vessels. One heavy western investor, in fact, got two ship names—the five-master *Governor Brooks* and one for his state *Wyoming*. Prosperity in the coal trade reached its peak in 1907 and then fell off sharply—the *Wyoming* did not come on the scene until the tide had turned. One hint of the new concern came from steam colliers. In 1907 the Sprague concern put three steamers on the run—the *Everett*, *Mulden*, and *Melrose*—named for north-side suburbs of Boston. Against this competition, the schooners had several advantages—cost of construction, fuel, and crew—about half the cost for steamers. But the steamers had still greater advantages. With their quicker loading and transit, they could make better than 40 voyages a year to 11 or 12 for the schooners. What was more, the port authorities in Hampton Roads often kept the schooners waiting while the steamers got in first to the berth. Profits under sail began to fall off, and it was only World War

600,000

TONS ANNUALLY



600,000

TONS ANNUALLY



THE
GREAT COAL SCHOONERS
OF
NEW ENGLAND

1870-1909

by
LT. W. J. LEWIS PARKER, U. S. C. G.

tain.

In 1879, upon the suggestion of Captain David O'Keefe, of the schooner *William D. Marvel*, the steam donkey engine was introduced in the larger schooners for hoisting sail, and for running the windlass, capstan, and pumps.²⁴ The big Taunton schooner *Josie R. Burt* was among the first to be fitted with this equipment. In company with the *Zaccheus Sherman*, a "handpuller" of the same size, she hove in her anchor and thirty fathoms of chain and set everything but her topmast staysails in thirty minutes. The *Sherman* required "half a day" to get underway and make all sail, by which time the *Burt* was hull down ahead. The weight of the gear in the four, and later in the five and six-masters, increased constantly, and this innovation was of the utmost importance in keeping down the size of the crew. Indeed it is difficult to see how the multi-masted schooner could have developed without this new equipment. Thenceforth it was necessary to carry an engineer, but he proved in every way a most worthy investment.

Among the most noted of the early four-masters was the *Providence*. When she was launched in 1879, she was the largest schooner afloat when she

THE GREAT COAL SCHOONERS OF NEW ENGLAND

1870-1909

by
LT. W. J. LEWIS PARKER, U. S. C. G.

tain.

In 1879, upon the suggestion of Captain David O'Keefe, of the schooner *William D. Marvel*, the steam donkey engine was introduced in the larger schooners for hoisting sail, and for running the windlass, capstan, and pumps.²⁴ The big Taunton schooner *Josie R. Burt* was among the first to be fitted with this equipment. In company with the *Zaccheus Sherman*, a "handpuller" of the same size, she hove in her anchor and thirty fathoms of chain and set everything but her topmast staysails in thirty minutes. The *Sherman* required "half a day" to get underway and make all sail, by which time the *Burt* was hull down ahead. The weight of the gear in the four, and later in the five and six-masters, increased constantly, and this innovation was of the utmost importance in keeping down the size of the crew. Indeed it is difficult to see how the multi-masted schooner could have developed without this new equipment. Thenceforth it was necessary to carry an engineer, but he proved in every way a most worthy investment.

Among the most noted of the early four-masters was the *Providence*



*Governor Powers,
Donkey Steam Engine.
Rockland, 1905*





Bryant Butler Brooks

(February 5, 1864–December 8, 1944)
Governor of Wyoming 1905–1911

MEMOIRS
of
BRYANT B. BROOKS

Cowboy, Trapper, Lumberman,
Stockman, Oilman, Banker, and
Governor of Wyoming



PRIVATELY PRINTED IN A LIMITED EDITION BY
THE ARTHUR H. CLARK COMPANY
Glendale, California
1939

vessel; as well as Mr. and Mrs. Ocea Cahill and Miss Cahill of Dorchester, Massachusetts; James W. Green and E. C. Naylor of Gloversville, New York; S. L. Dodd of East Orange, New Jersey; W. C. Dodd of Balston Spa, New York; H. D. Bonesteel of Troy, New York; and Mr. and Mrs. John Brooks of Boston, Massachusetts, my elder brother and his wife.

Upon our arrival Monday evening we were taken out to the New Meadows inn and entertained with one of the famous Cahill's shore dinners.

Early the next morning we were conducted on an observation tour of the city. Few of our party had ever been in a shipbuilding city before, and all of us were filled with wonder and delight at the stirring scenes in the active yards.

Captain S. R. Percy and Frank A. Small, with the assistance of their wives, did everything possible for our comfort and enjoyment, which we duly appreciated.

The scene at the yard just before the launching was a notable one. The new five-master was resting on the ways of the yard of Hon. William T. Donnell, which was hired for the purpose of building the vessel, as the ways of the Percy and Small yard were overcrowded at the time the keel of the "Governor Brooks" was laid.

The schooner presented a stately picture on the ways, ready for her maiden dip into the waters of the blue Kennebec. She was not quite ready for the sea, and her top masts were not in position, but strung along between her lower masts was the international signal code, and a large red and white banner bearing the initials, P. & S., as well as a special flag flaunting the insignia, V—V, the brand used on my home ranch in Wyoming.

Our launching party arrived early and was immedi-

ately taken aboard the big craft. The workmen of the yard made merry music with their sledge hammers, knocking away the props that supported the vessel. At exactly 12:20 the cry went up, "There she goes," and slowly but surely the ship slid down the ways and out into the waiting stream of the Kennebec.

Just as the vessel's bow struck the water, my daughter, Abby, dropped a handsome shower bouquet over the bow and pronounced those time honored words, "I christen thee, Governor Brooks." A mighty cheer went up from the crowd and the ships and manufacturing plants, tugboats and steamers all blew their whistles loudly in celebration of the event. The big schooner swung easily into the stream, attended by two tugboats, and dropped her anchor.

There was a wild scramble by the boys and some of the older people at the end of the wharf for the roses that the sponsor dropped into the water when christening the ship, but few were successful in capturing the wanted souvenirs.

After the craft was in the stream we were served with a refreshing luncheon on board, where the rooms and cabin were beautifully decorated with flowers. Then we were brought to shore and taken by special electric cars to the New Meadows inn, where a banquet was served in honor of the occasion.

This launching held nation-wide attention because it culminated a movement begun by the Percy and Small organization at the beginning of that year, to interest Western capital and friendship for Eastern shipping. It made the schooner, "Governor Brooks," the symbol of a handclasp of East and West, in mutual sympathy on maritime problems.

Investor in *Governor Brooks*
Launched at Percy & Small
Shipyard, October 22, 1907



vessel; as well as Mr. and Mrs. Ocea Cahill and Miss Cahill of Dorchester, Massachusetts; James W. Green and E. C. Naylor of Gloversville, New York; S. L. Dodd of East Orange, New Jersey; W. C. Dodd of Balston Spa, New York; H. D. Bonesteel of Troy, New York; and Mr. and Mrs. John Brooks of Boston, Massachusetts, my elder brother and his wife.

Upon our arrival Monday evening we were taken out to the New Meadows inn and entertained with one of the famous Cahill's shore dinners.

Early the next morning we were conducted on an observation tour of the city. Few of our party had ever been in a shipbuilding city before, and all of us were filled with wonder and delight at the stirring scenes in the active yards.

Captain S. R. Percy and Frank A. Small, with the assistance of their wives, did everything possible for our comfort and enjoyment, which we duly appreciated.

The scene at the yard just before the launching was a notable one. The new five-master was resting on the ways of the yard of Hon. William T. Donnell, which was hired for the purpose of building the vessel, as the ways of the Percy and Small yard were overcrowded at the time the keel of the "Governor Brooks" was laid.

The schooner presented a stately picture on the ways, ready for her maiden dip into the waters of the blue Kennebec. She was not quite ready for the sea, and her top masts were not in position, but strung along between her lower masts was the international signal code, and a large red and white banner bearing the initials, P. & S., as well as a special flag flaunting the insignia, V—V, the brand used on my home ranch in Wyoming.

Our launching party arrived early and was immedi-

ately taken aboard the big craft. The workmen of the yard made merry music with their sledge hammers, knocking away the props that supported the vessel. At exactly 12:20 the cry went up, "There she goes," and slowly but surely the ship slid down the ways and out into the waiting stream of the Kennebec.

Just as the vessel's bow struck the water, my daughter, Abby, dropped a handsome shower bouquet over the bow and pronounced those time honored words, "I christen thee, Governor Brooks." A mighty cheer went up from the crowd and the ships and manufacturing plants, tugboats and steamers all blew their whistles loudly in celebration of the event. The big schooner swung easily into the stream, attended by two tugboats, and dropped her anchor.

There was a wild scramble by the boys and some of the older people at the end of the wharf for the roses that the sponsor dropped into the water when christening the ship, but few were successful in capturing the wanted souvenirs.

After the craft was in the stream we were served with a refreshing luncheon on board, where the rooms and cabin were beautifully decorated with flowers. Then we were brought to shore and taken by special electric cars to the New Meadows inn, where a banquet was served in honor of the occasion.

This launching held nation-wide attention because it culminated a movement begun by the Percy and Small organization at the beginning of that year, to interest Western capital and friendship for Eastern shipping. It made the schooner, "Governor Brooks," the symbol of a handclasp of East and West, in mutual sympathy on maritime problems.

Governor Brooks
Launched at Percy & Small
Shipyard, October 22, 1907

...satisfac- ved. Word gton that you, will m. There away of ctive mar- o the low- est of the h quietlier closing of eker Trust ween one per cent. 5. Stand- market as lve and a y's prices ears. company ive.)

00

story of

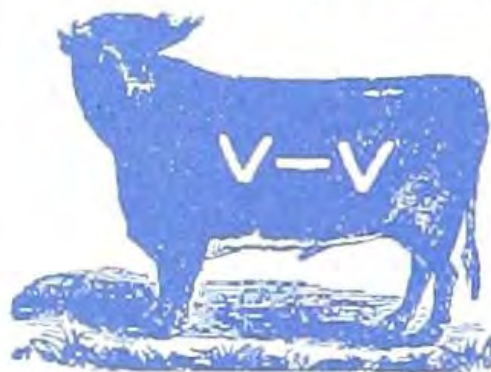
The Shipping City was honored to-day by the presence of Governor Bryant B. Brooks of Wyoming, who made the trip across the continent to attend the launching of the five-masted schooner named in his honor from the Percy & Small yard. The day was perfect for the event and Bath people turned out in large numbers, while the number of invited guests and visitors from abroad was large. The craft made a handsome picture, decorated with flags and signals and one feature of the trimmings was a flag with "V-V" in red which attracted much of attention. It was a facsimile of the brand of Governor Brooks' ranch in Wyoming and was a little surprise for the governor, arranged by his friends and he greatly appreciated it. There was considerable curiosity among some of the captains present as to what it meant. One captain remarked, "I never saw it in my code and suppose it is some Masonic sign."

Governor Brooks, accompanied by Mrs. Brooks and daughter, Miss Ab-

W. Herrett, A.
Mr. and Mrs. C.
Norwood, Mass.;
and daughter, So
and Mrs. Roy H
H.; Mrs. Baker
Somerville, Mass.
Concord, N. H.;
Cahill and daugh
Dorchester, Mass
Clark, Eleazer C
Captain Charleso
the schooner Ad
Captain A. L. W
H. Clifford; G. G
Mr. and Mrs. Ellis
N. Y.; Jack Holli
ing and "Post Ho
Wyoming; C. W
tain Sewall Peter
of the Camilla M
Whitehouse, Top
Wilson, Brunswi
lain, Portland; C
Boggs, Boston; C
Superintendent c
ment, New York
Hon. and Mrs. A.

—Bath Daily Times, October 22, 1907.

B. B. BROOKS & CO.



P. O. address, Deer Creek
Wyo.

Range, heads of Muddy, south
side of Casper mountains.

Other brands, **3** left thigh
D

Horse brand, same as cut, or
left shoulder.

There were three streaks of 14 x 14 between decks, the balance being 12 inches thick. The middle deck beams were 11 x 13 and 12 x 13, the balance 12 inches. The upper deck beams were 9 x 13.

The lower and main decks were of yellow pine, 3 x 6. The poop deck was white pine, 3½ by 5 inches. There were two sets of stringers on each deck 13 x 13, locked down and up, and the stringers on the main deck were 12 x 12, also locked the same.

The poop was ceiled with 11 inch thickness and one streak of 14 above. There were two streaks of lock streaks on main deck, 9 x 14, on the middle deck were two streaks, 12 x 14.

The planking was three streaks of garboard, 8 x 14, balance to rail was 5 x 14, down to six inches. The rail was 6 x 15 inches. There were two belt straps of 12 x ¾ iron running the whole length of the hull. She had shelf streaks 14 x 14 on each deck, instead of knees. There were four hatches, 12 x 16 feet, for convenient handling of cargo, in connection with Hyde Windlass engine forward and steam hoister aft.

The after house was 30 x 34 feet and contained captain's room, three spare staterooms, mate's room, dining-room, and pantry. The cabin was finished in quartered oak and mahogany with white spruce and cypress ceilings, hardwood floors, and decorated with gold trimmings.

The midship house was 20 x 27 feet and had second mate's room, steward's room, gallery, mess-room, and carpenter shop.

The forward house was 27 x 27 feet and had the engineer's room, sail-room, engine-room, and forecastle.

All of the houses were eight feet high, and all had

steam heat. The midship house and the forward house were finished in North Carolina pine.

The "Governor Brooks" had a handsome set of Oregon masts, the lower masts being 115 feet long, the fore 30 inches in diameter, and the others were 29 inches. The top masts were 56 feet long, the fore being 21 inches in diameter and the other 17 inches.

The new schooner was commanded by Captain Angus M. McLeod, considered one of the finest sailors in coastwise carrying trade. She was ready for sea on November 19, 1907.

Less than two months later the first dividends were paid on the "Governor Brooks." Other dividends followed regularly.

On September 20, 1915, a dividend of eight thousand dollars was declared to owners, on account of oil freight from New York to Santos. It said: "This schooner is chartered to load linseed at Buenos Aires for an Atlantic port north of Hatteras at thirty shillings per ton. A complete statement will be made out at the end of the voyage."

My initial investment in the "Governor Brooks" was paid back in full in dividends by July 11, 1916.

During the World war our company sold the entire fleet of sixteen vessels, of which I had an interest only in four or five, to some government for colliers. On September 12, 1917, I received payment for my interest in the schooner, "Governor Brooks," sold through the Percy and Small Company, Inc., ship brokers, of 52 Front street, Bath, Maine.

Sometime after we sold her, the "Governor Brooks" went on the rocks off the coast of Brazil and was beaten to death by the waves that she once rode triumphantly.

Another of our vessels that met a tragic end after we

had sold her with the rest of the fleet, was the "Wyoming." This schooner was the largest one of its class in the world and was built in 1909.

The launching of the "Wyoming" in 1909 was a scene similar to that of the "Governor Brooks" two years before. Mrs. Brooks and myself were present with our party, and our third daughter, Lena, who was east in school at the time, was the sponsor.

This vessel also paid good dividends during the period I held an interest, and was disposed of with the fleet in 1917, returning my capital investment.

Seven years later, the "Wyoming" went down off Chatham, Massachusetts, in a terrible storm. That very night my wife and I were on the stormy seas between Halifax and New York harbor returning from a trip to Europe.

The next morning we were greeted in New York by glaring headlines across the papers, about the tragedy of the "Wyoming."

The entire crew of the big six-masted schooner were lost with her, according to coast guardsmen. Captain Charles Glaesel of Boston, who commanded the vessel, had a crew of twelve, and was bound from Norfolk to St. John, New Brunswick, with five thousand tons of coal. No survivor was ever found to tell the story of her disaster.

This shipping venture not only paid good returns on my investment but gave me an insight into the maritime industry. Since one of the stumbling blocks in the way of all legislation proposed in Washington is the lack of understanding of other sections of the country, I believe that national benefit and individual breadth is derived from investments tending to break down sectional prejudice.



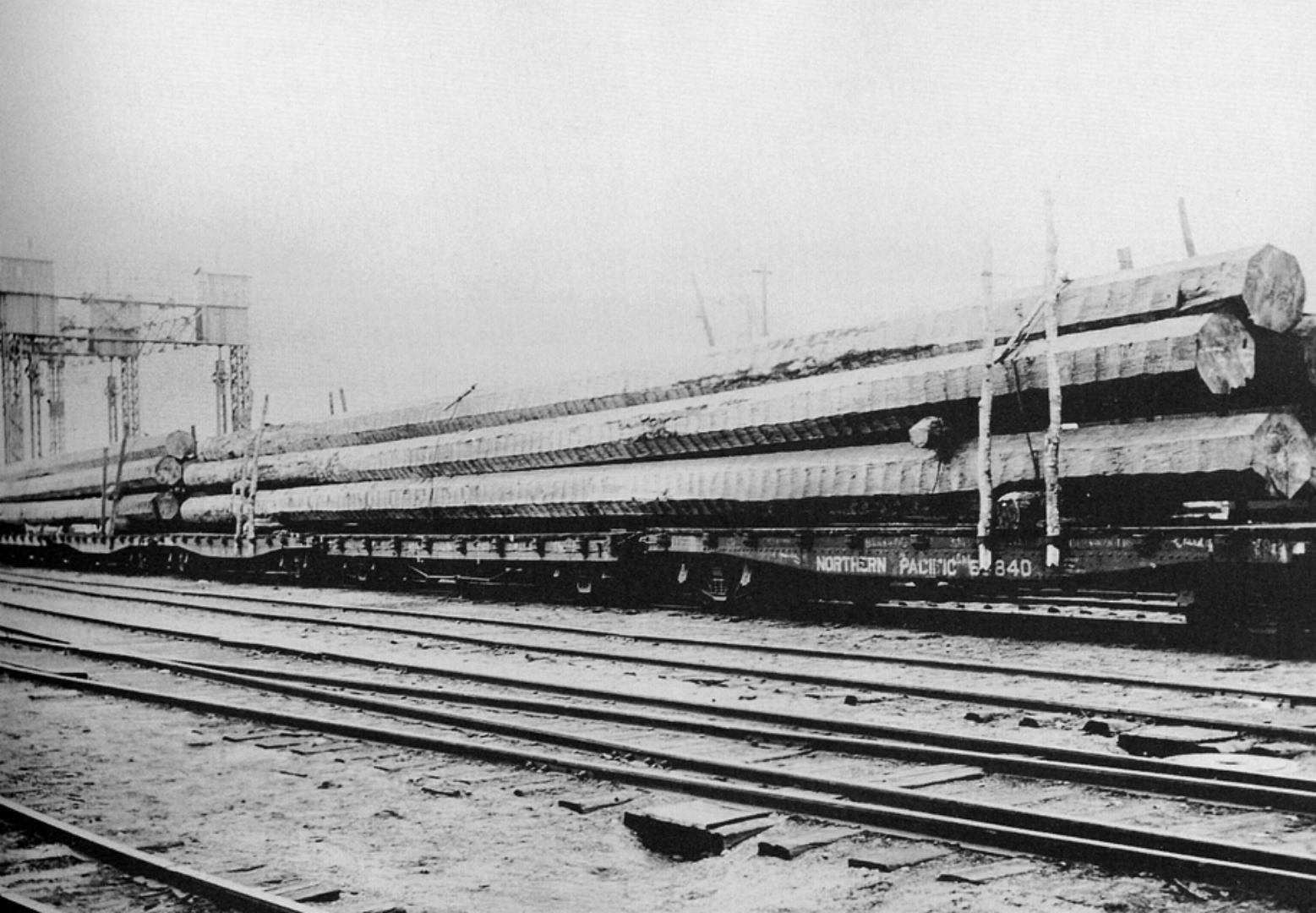


123 feet tall, growing since before the
American Revolution

A photograph of a dense forest with tall, slender trees. Sunlight filters through the canopy, creating dappled light on the forest floor. The trees are mostly evergreens, with some deciduous trees visible in the background. The forest floor is covered in green undergrowth and fallen leaves.

123 feet tall, growing since before the
American Revolution

White oak frames from Virginia
Planks and deck Southern pine



International Marine Engineering

JANUARY, 1910.

THE SIX-MASTED SCHOONER WYOMING.

Bath, Me., has demonstrated her supremacy in marine construction in many forms and on many occasions, but the product which first brought fame to the city was the wooden sailing vessel. Although in recent years some of the largest and fastest steel warships in the United States navy have been turned out from her yards, still the work of building wooden sailing vessels goes on, and each year magnificent vessels of this type sail proudly down the Kennebec to join the already large fleet of Bath-built ships engaged in the coasting trade.

The six-masted schooner *Wyoming*, launched from the yards of Percy & Small, Bath, Me., on December 15, is the

The beams are 13 inches by 14 inches in the lower hold, the main deck beams are 11 inches by 12 inches, and the upper deck beams 9 inches by 13 inches. The ceiling in the poop is 11 inches and 14 inches. The lock strakes in the lower hold are 12 inches by 14 inches, two strakes, and the between-deck waterways are 12 inches by 14 inches two strakes. The stanchions in the lower hold are 13 inches by 14 inches and between decks 11 inches by 13 inches. No hanging knees are used in the construction of the vessel. There is one shelf strake 14 inches by 14 inches in the lower hold; one shelf strake between decks 14 inches by 14 inches and one under the poop deck 14 inches by 14 inches.



THE LARGEST WOODEN SAILING VESSEL EVER BUILT. NOTE THE DIAGONAL BRACING OF THE HULL.

International Marine Engineering

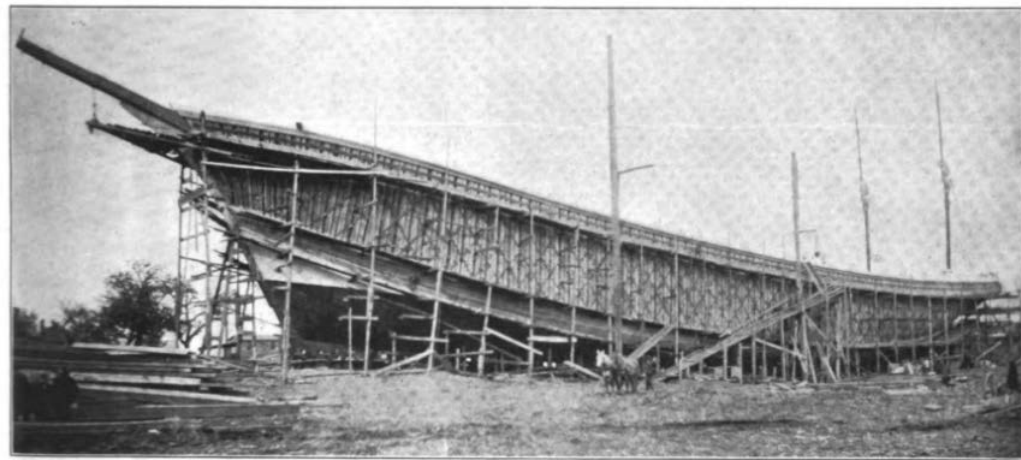
JANUARY, 1910.

THE SIX-MASTED SCHOONER WYOMING.

Bath, Me., has demonstrated her supremacy in marine construction in many forms and on many occasions, but the product which first brought fame to the city was the wooden sailing vessel. Although in recent years some of the largest and fastest steel warships in the United States navy have been turned out from her yards, still the work of building wooden sailing vessels goes on, and each year magnificent vessels of this type sail proudly down the Kennebec to join the already large fleet of Bath-built ships engaged in the coasting trade.

The six-masted schooner *Wyoming*, launched from the yards of Percy & Small, Bath, Me., on December 15, is the

The beams are 13 inches by 14 inches in the lower hold, the main deck beams are 11 inches by 12 inches, and the upper deck beams 9 inches by 13 inches. The ceiling in the poop is 11 inches and 14 inches. The lock strakes in the lower hold are 12 inches by 14 inches, two strakes, and the between-deck waterways are 12 inches by 14 inches two strakes. The stanchions in the lower hold are 13 inches by 14 inches and between decks 11 inches by 13 inches. No hanging knees are used in the construction of the vessel. There is one shelf strake 14 inches by 14 inches in the lower hold; one shelf strake between decks 14 inches by 14 inches and one under the poop deck 14 inches by 14 inches.



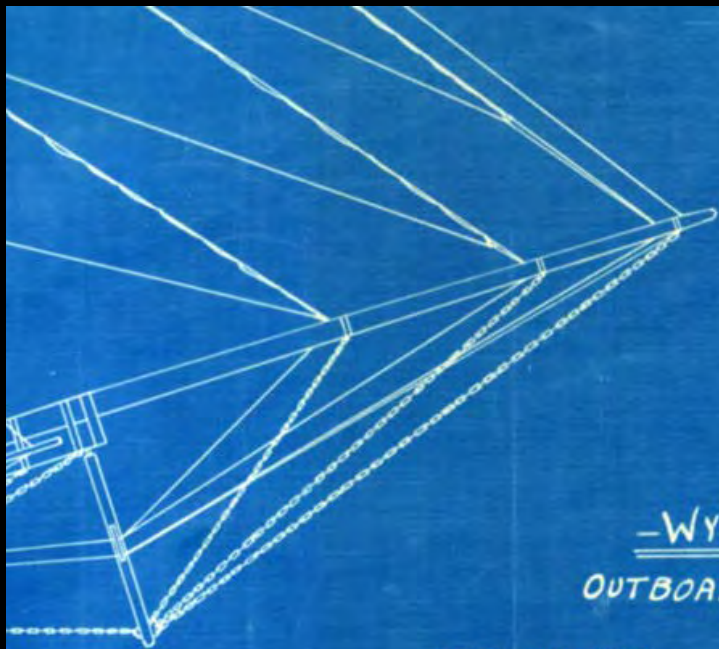
THE LARGEST WOODEN SAILING VESSEL EVER BUILT. NOTE THE DIAGONAL BRACING OF THE HULL.

AND A 12-FOOT SAIL.

The hull is reinforced by a wrought iron belt strap 8 inches by $\frac{1}{2}$ inch, and a system of diagonal belt strapping throughout 4 inches by $\frac{1}{2}$ inch, as shown by the photograph taken during the construction. This method of strengthening has been exploited with highly favorable results during the past few years in several of the larger wooden schooners. It has proved to be the most effective means of keeping the long and otherwise flexible hulls in shape.



Bant Hanson
Designer



-WYOMING-
OUTBOARD PROFILE

MAR. 28, 1917

SCALE: $\frac{1}{12}$ " = 1 FOOT.

PLAN No. 201

Ole Hanson
Bath, Me.



Ole

Bant Hanson
Designer





Master Builder
Miles M. Merry