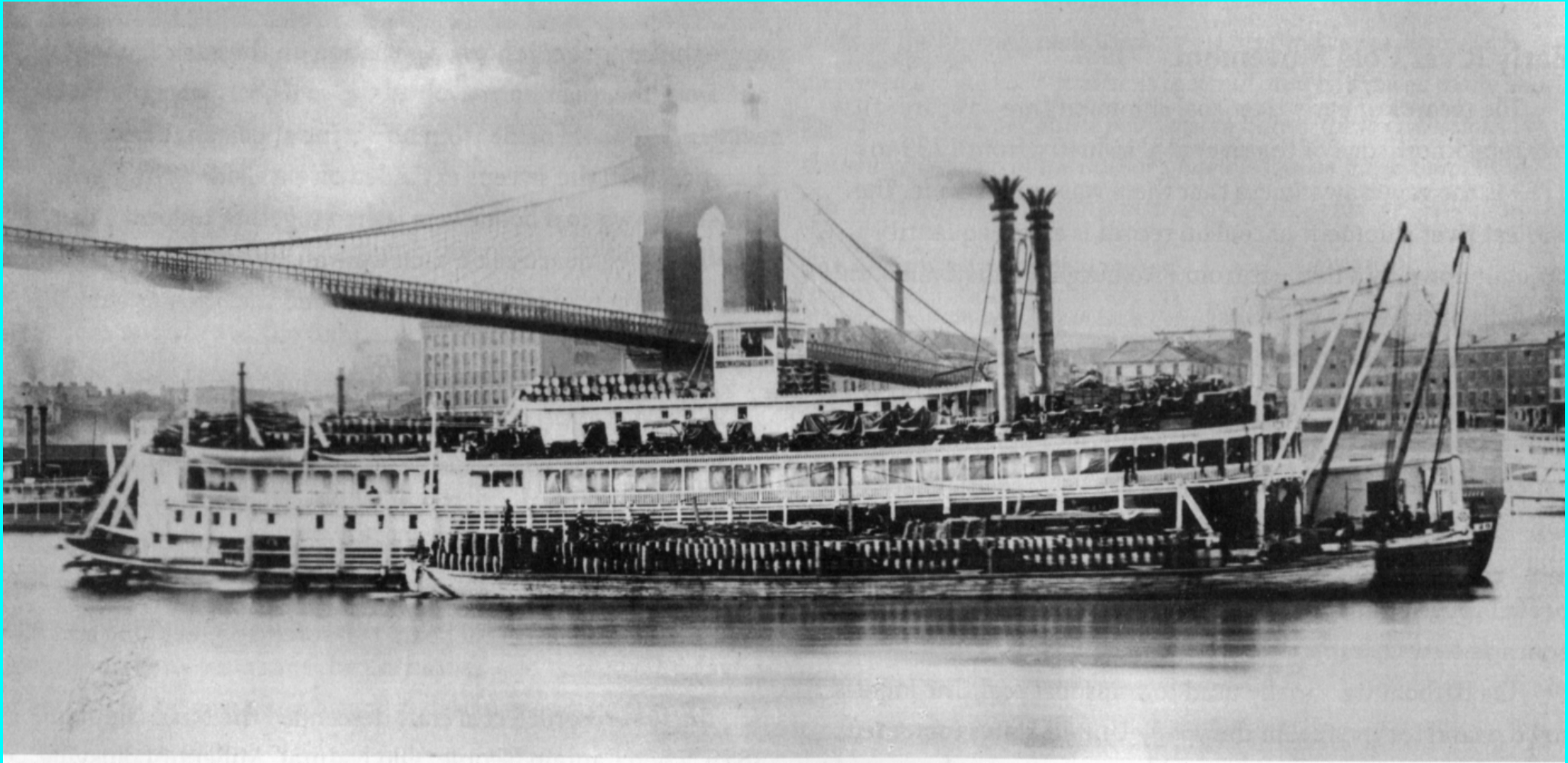


Mississippi River Steamboat Bi-Centennial

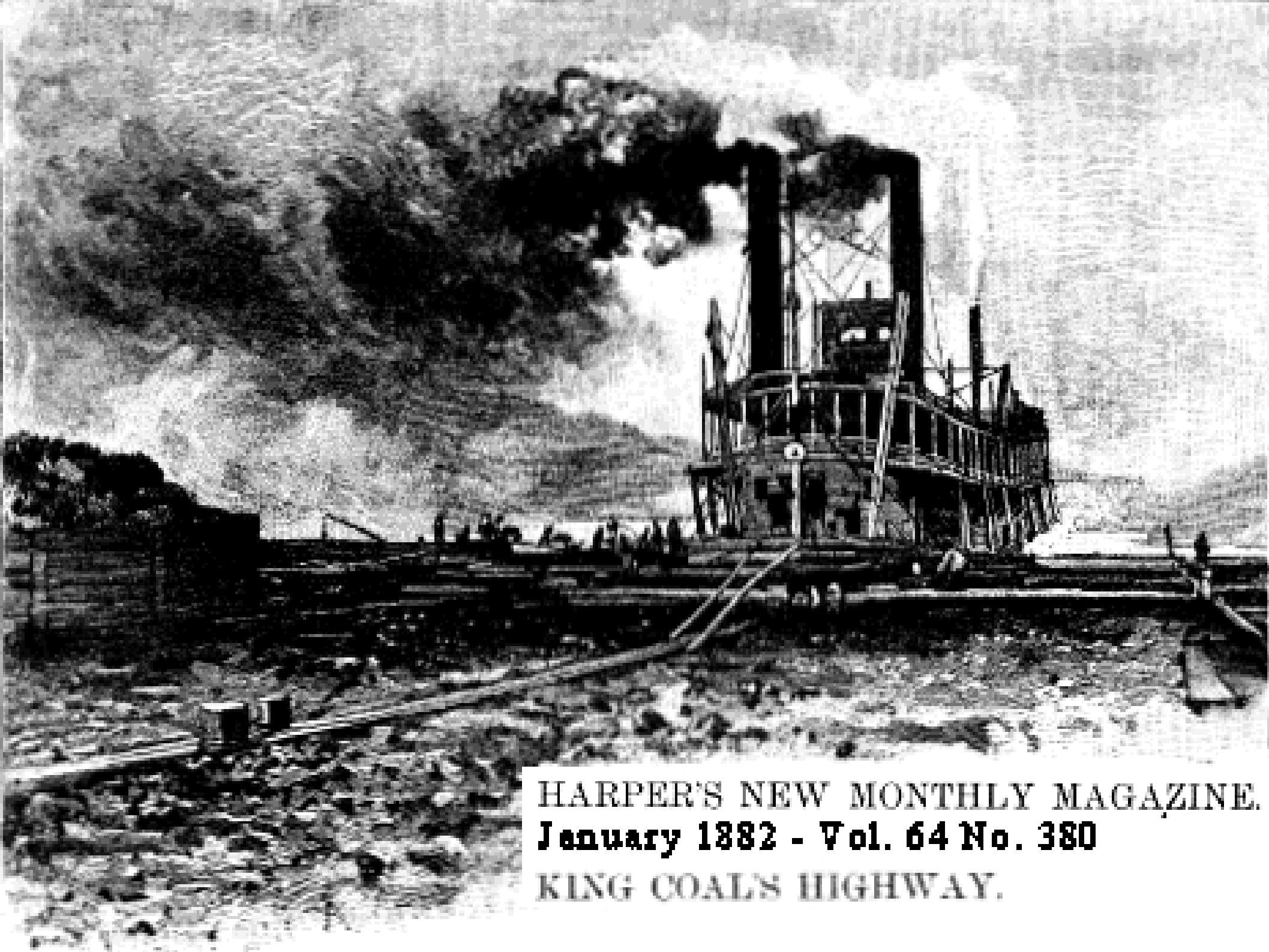
OLLI at WVU
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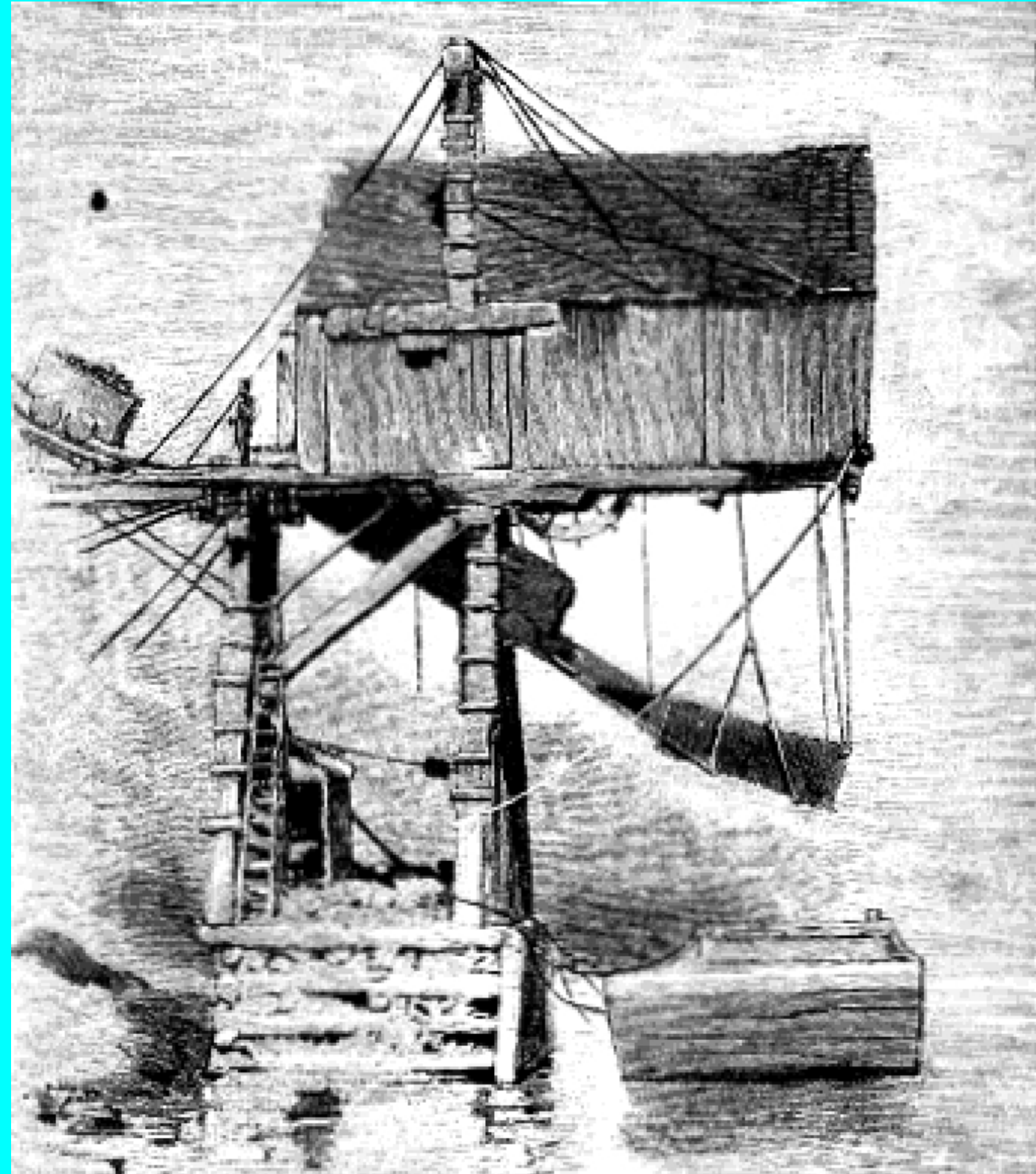




The packet Golden Rule at Cincinnati near the Roebling Suspension Bridge, ca. 1870s. Her hurricane deck is filled with barrels, buggies, and boxes.



HARPER'S NEW MONTHLY MAGAZINE.
January 1882 - Vol. 64 No. 380
KING COALS HIGHWAY.

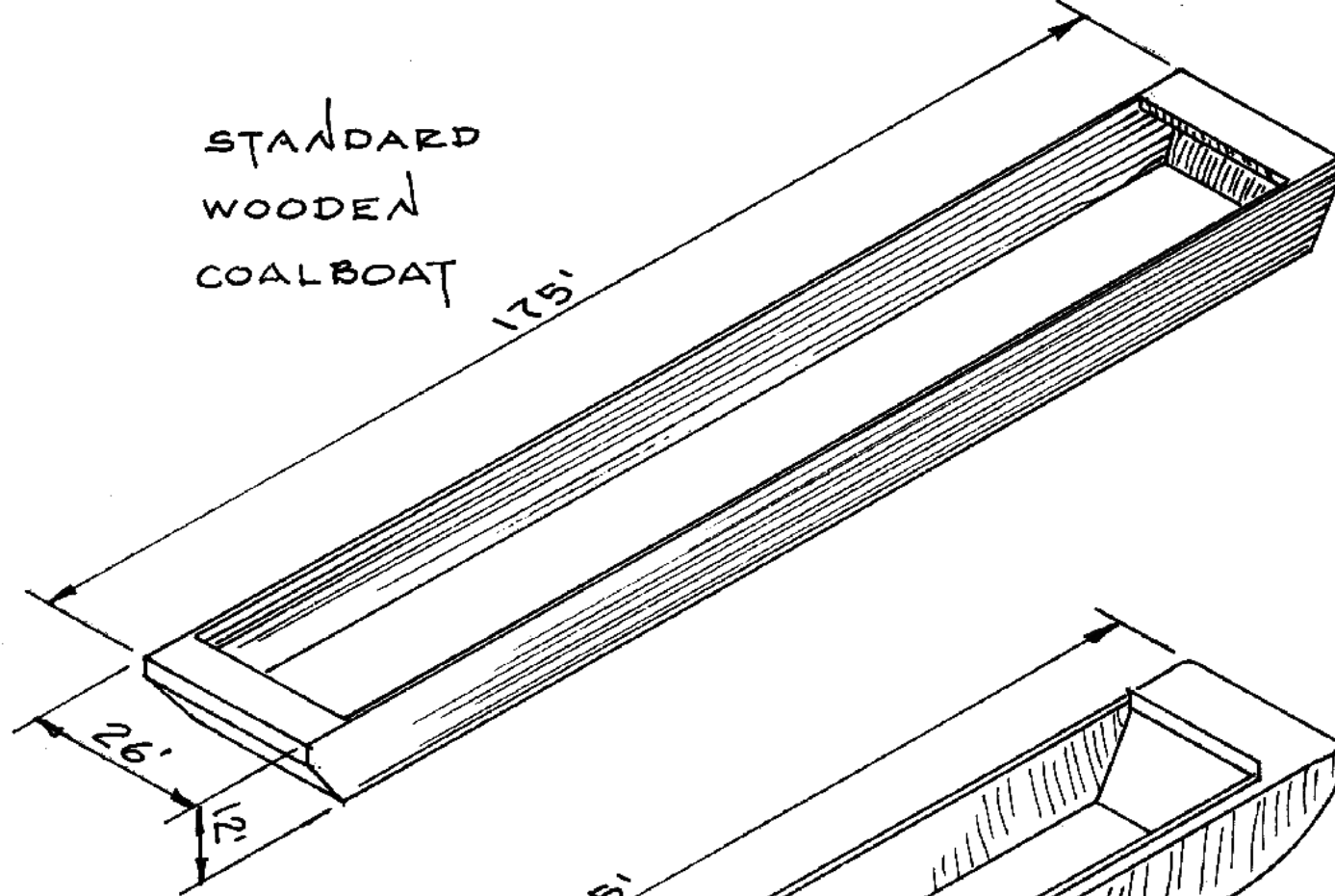


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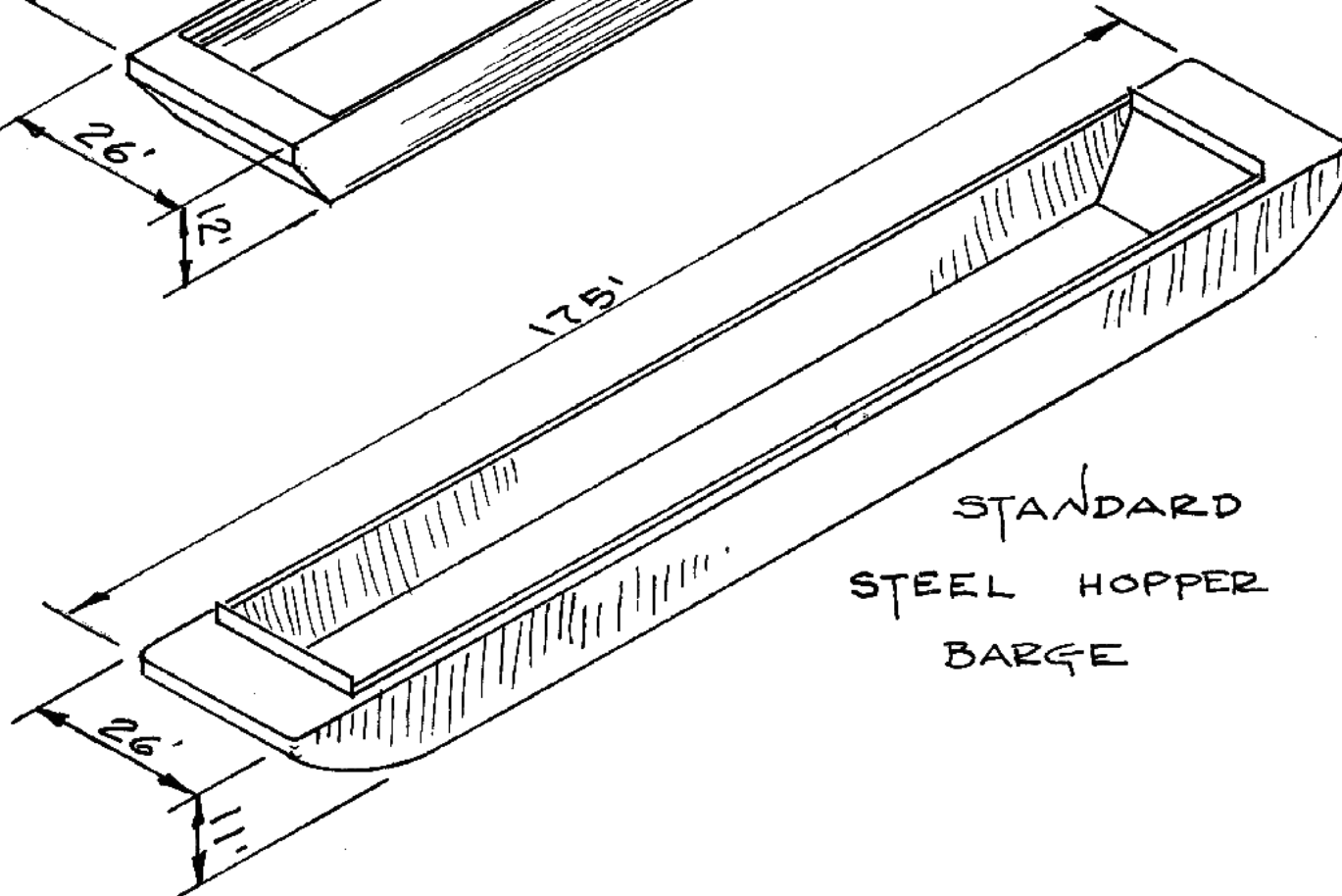




STANDARD
WOODEN
COALBOAT

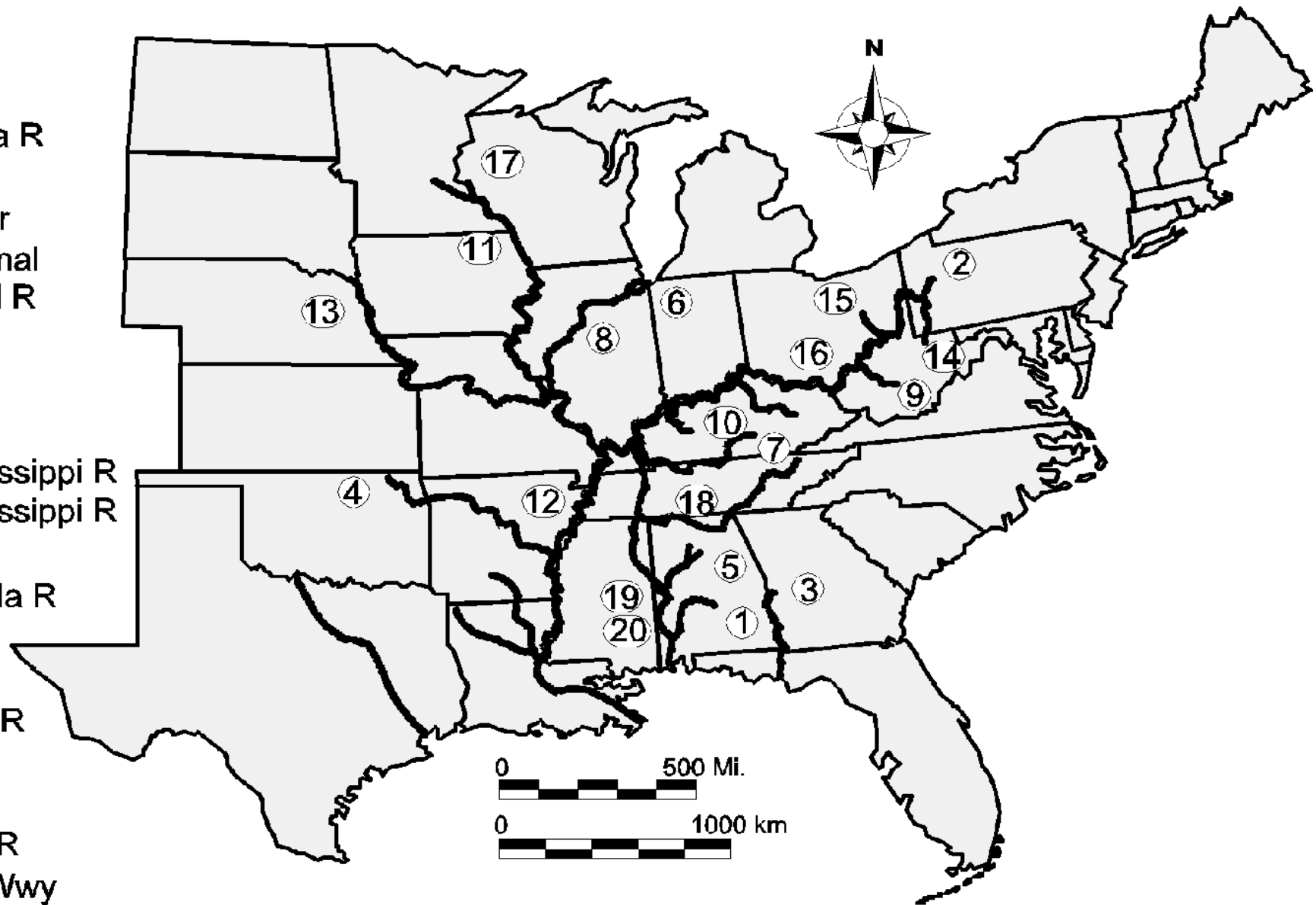


STANDARD
STEEL HOPPER
BARGE



- ① Alabama R
- ② Allegheny R
- ③ Apalachicola R
- ④ Arkansas R
- ⑤ Black Warrior
- ⑥ Chicago Canal
- ⑦ Cumberland R
- ⑧ Illinois R
- ⑨ Kanawha R
- ⑩ Kentucky R
- ⑪ Upper Mississippi R
- ⑫ Lower Mississippi R
- ⑬ Missouri R
- ⑭ Monongahela R

- ⑮ Muskingum R
- ⑯ Ohio R
- ⑰ St Croix R
- ⑱ Tennessee R
- ⑲ Tenn-Tom Wwy
- ⑳ Tombigbee R

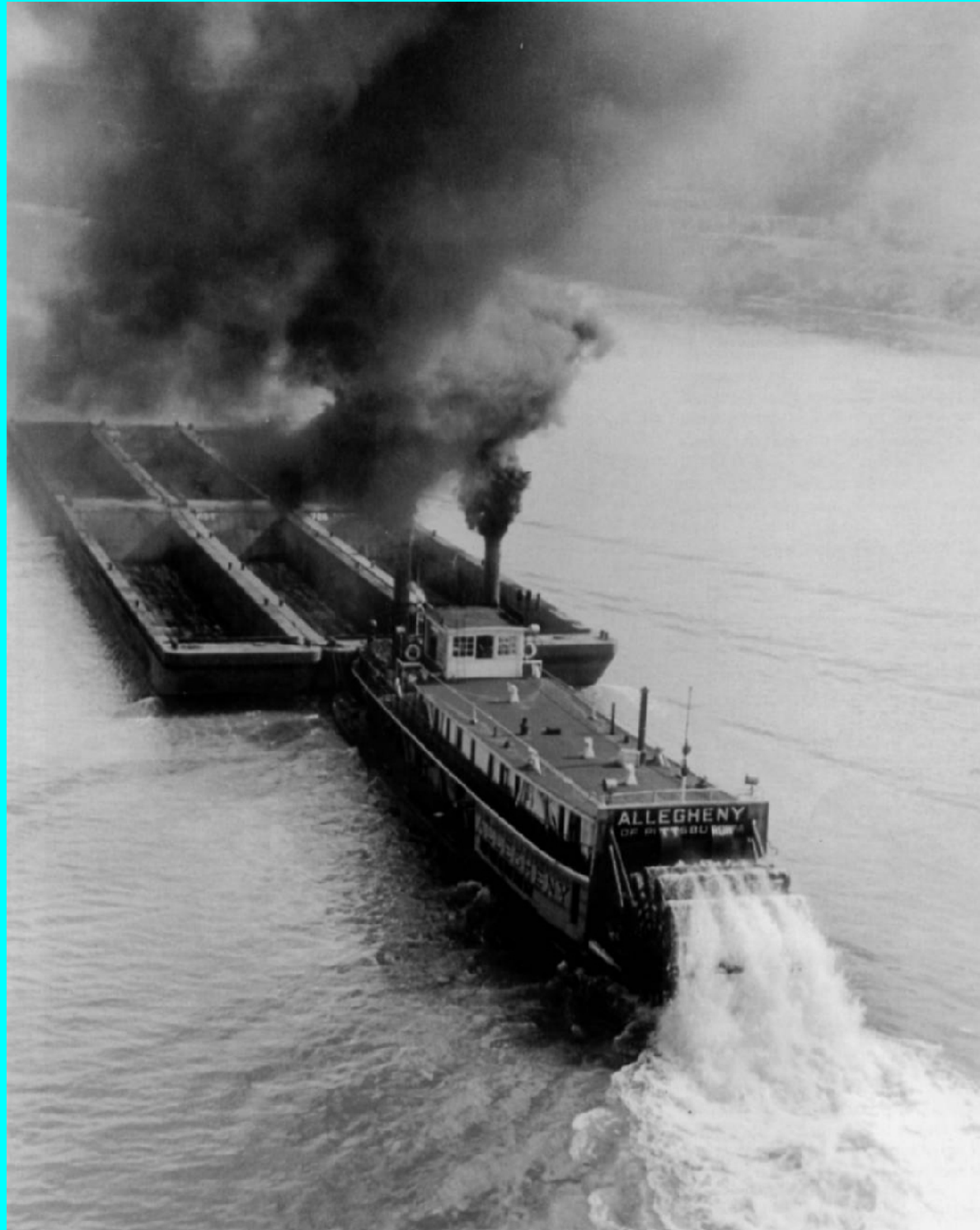


The Western Rivers



The gas boat era. Several of them are shown on the Little Kanawha River above slackwater, Big Root Shoals, eight miles below Grantsville, West Virginia.

Courtesy of The Waterways Journal



The Carnegie Steel Co. ALLEGHENY (T0105) on her way back up the Monongahela to the mines with six empties. Not sure of the bridge that photographer Beheler used but he surely captured the smoke!



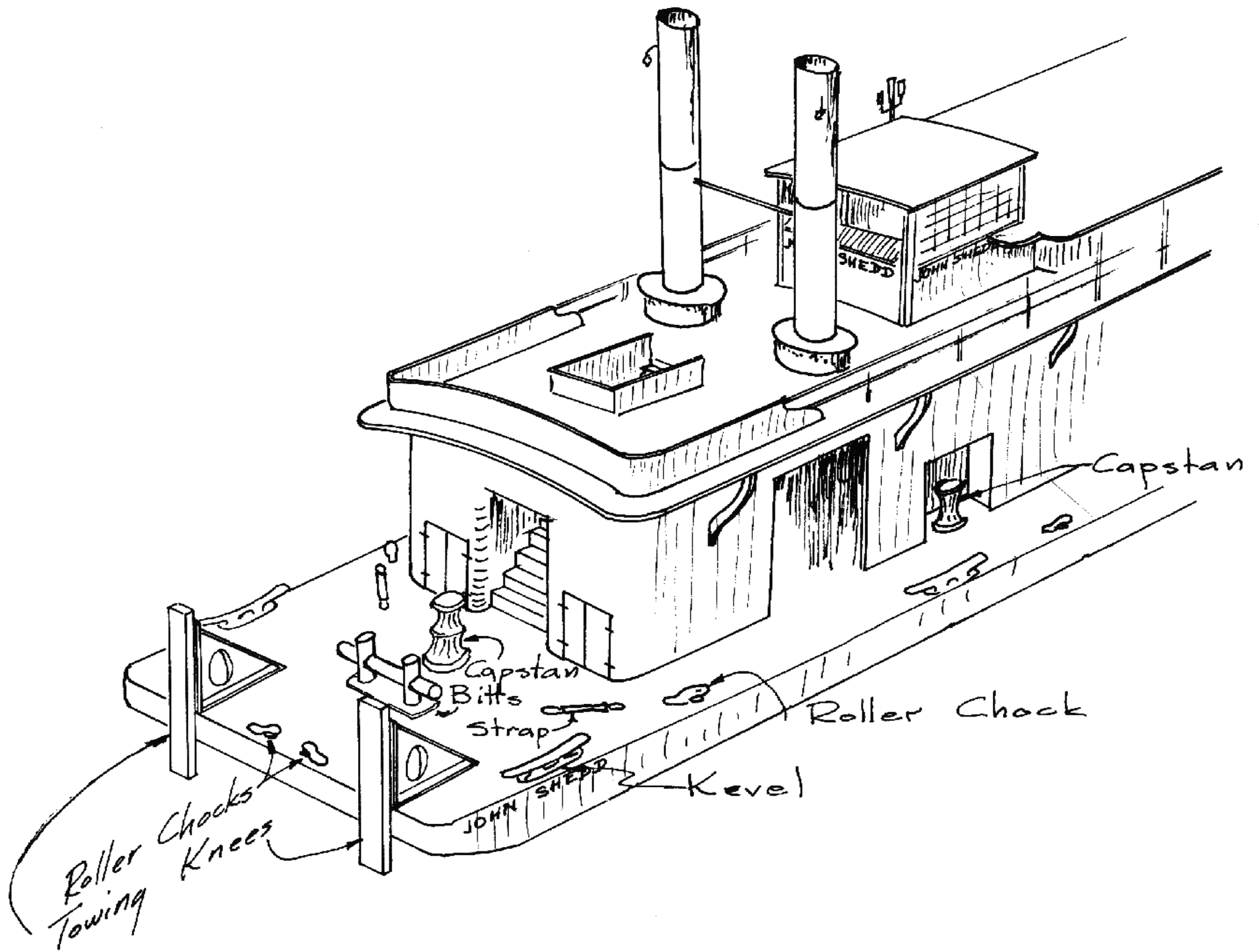
The U.S inland waterways system provides channel dimensions which enable users to deploy the most economical fleet of the largest pushed tows in the world. A tow of 40 barges with 60,000 tons (above) moves down the Lower Mississippi River.

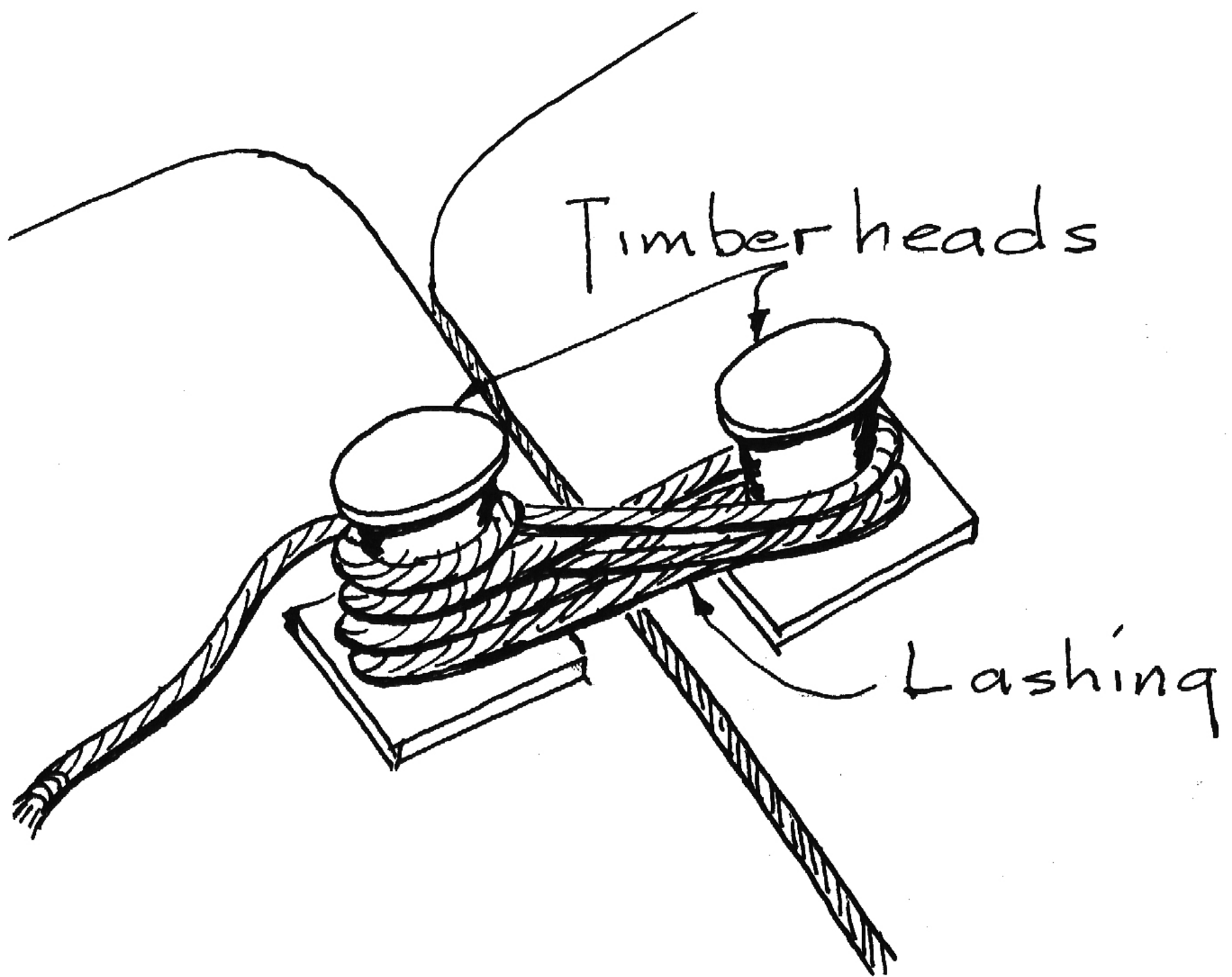


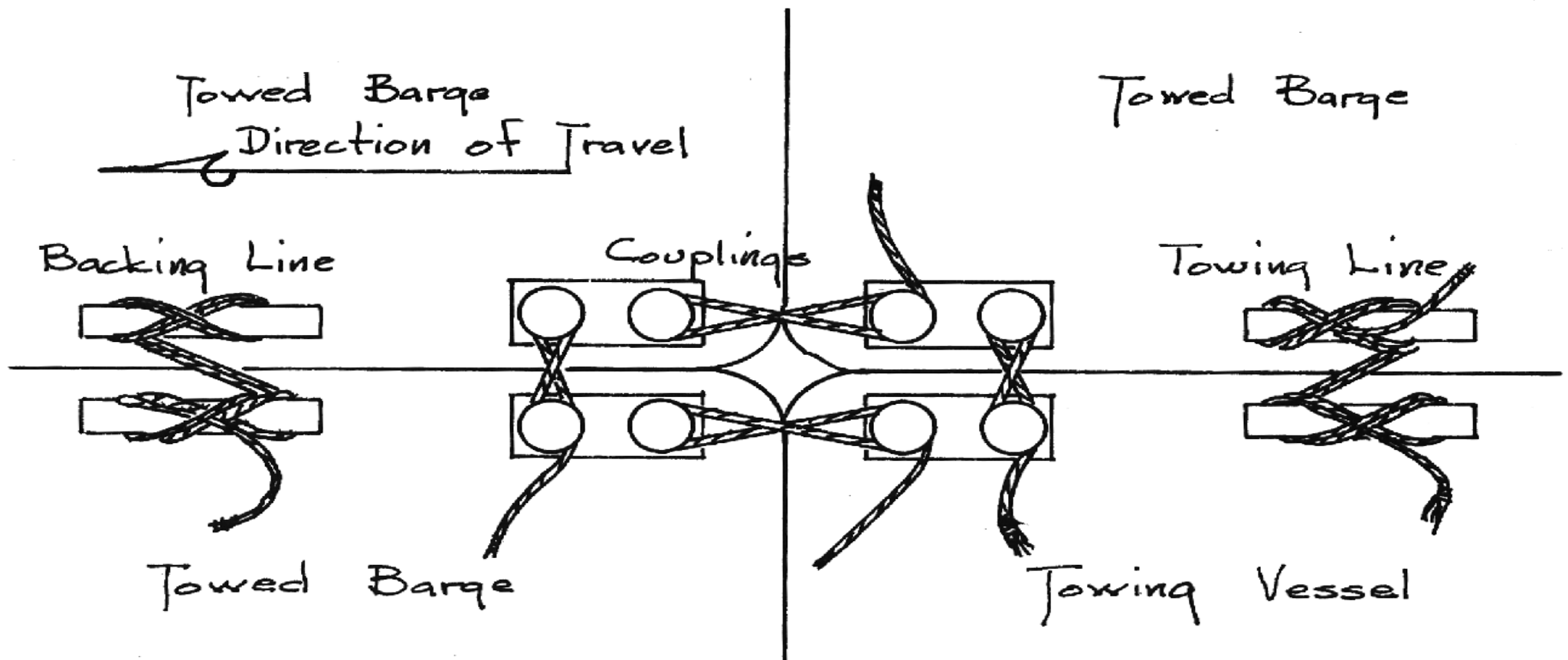
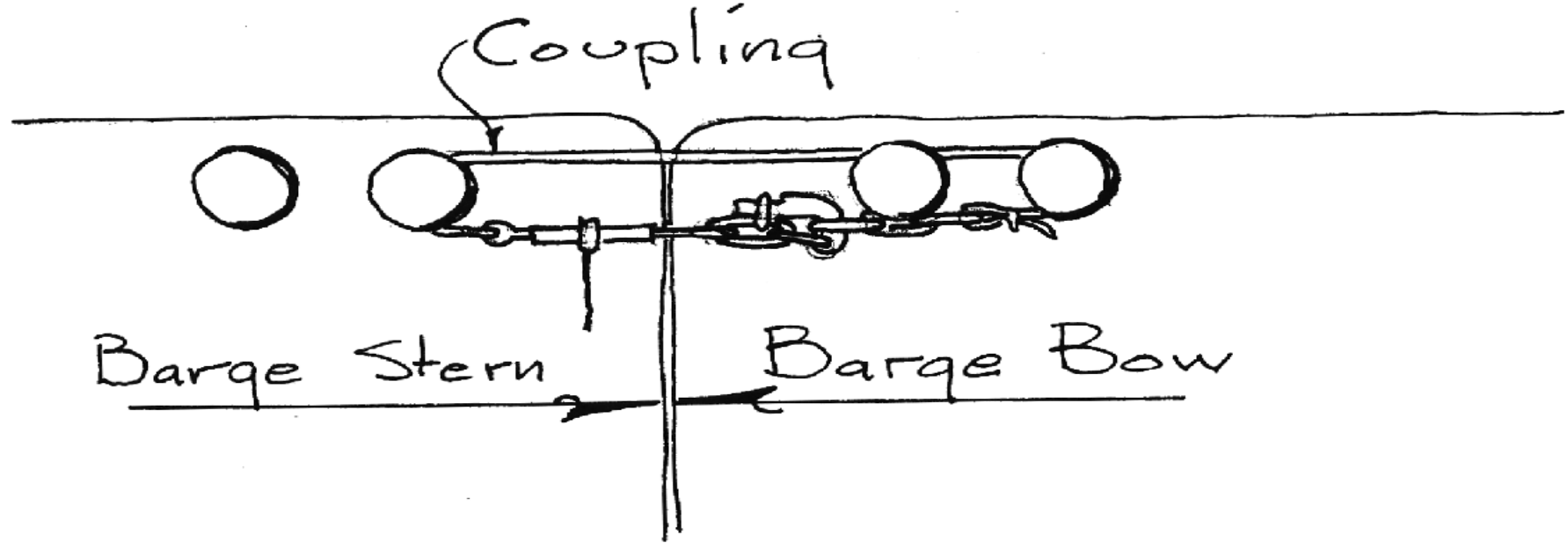


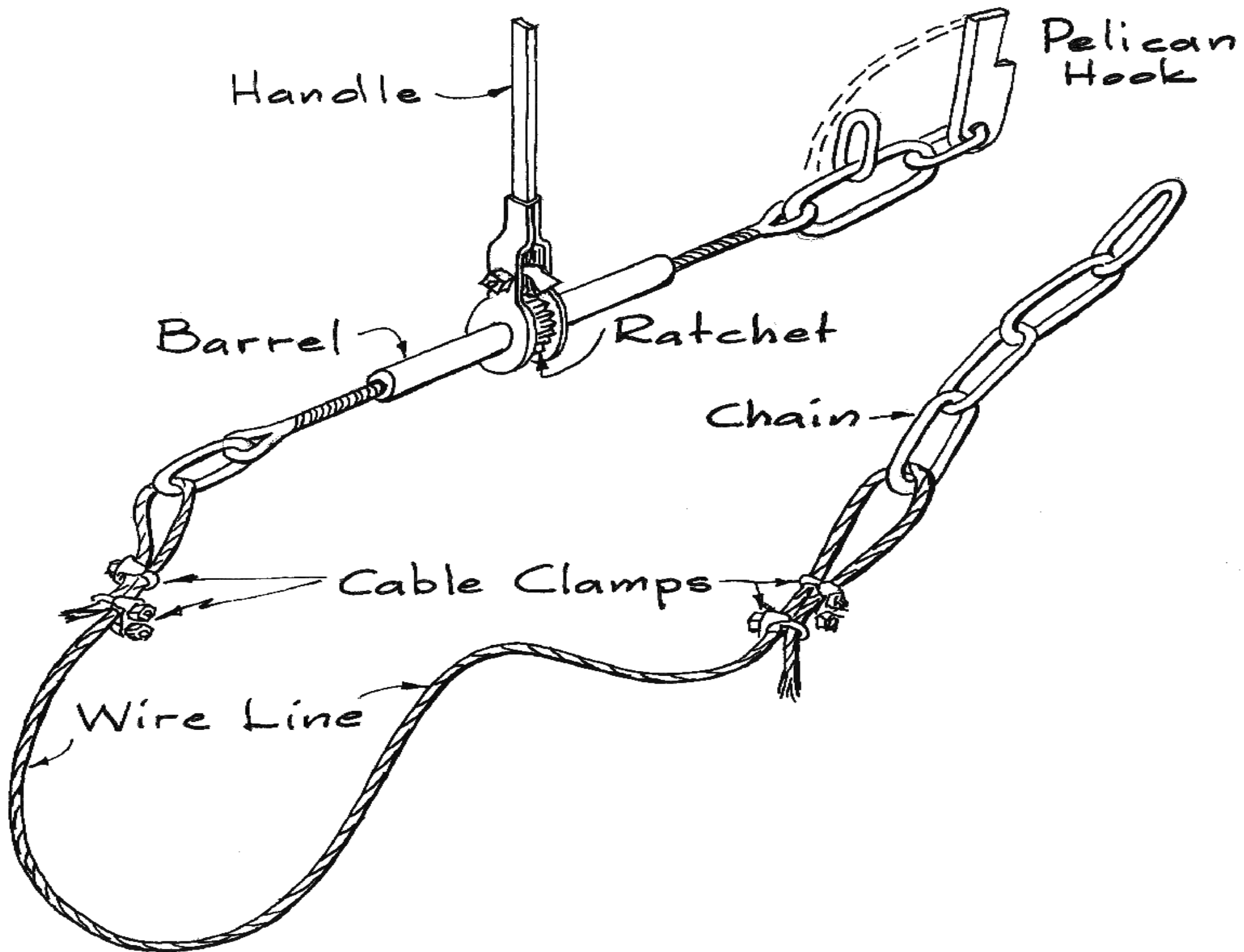
Jones & Laughlin Steel Co. SAILOR (T2226), 1924-1951. In the Mon River pools she was called "The Little Sprague" with the largest engine-room, biggest paddlewheel and most spacious pilothouse.

Photograph by Noble G. Beheler.







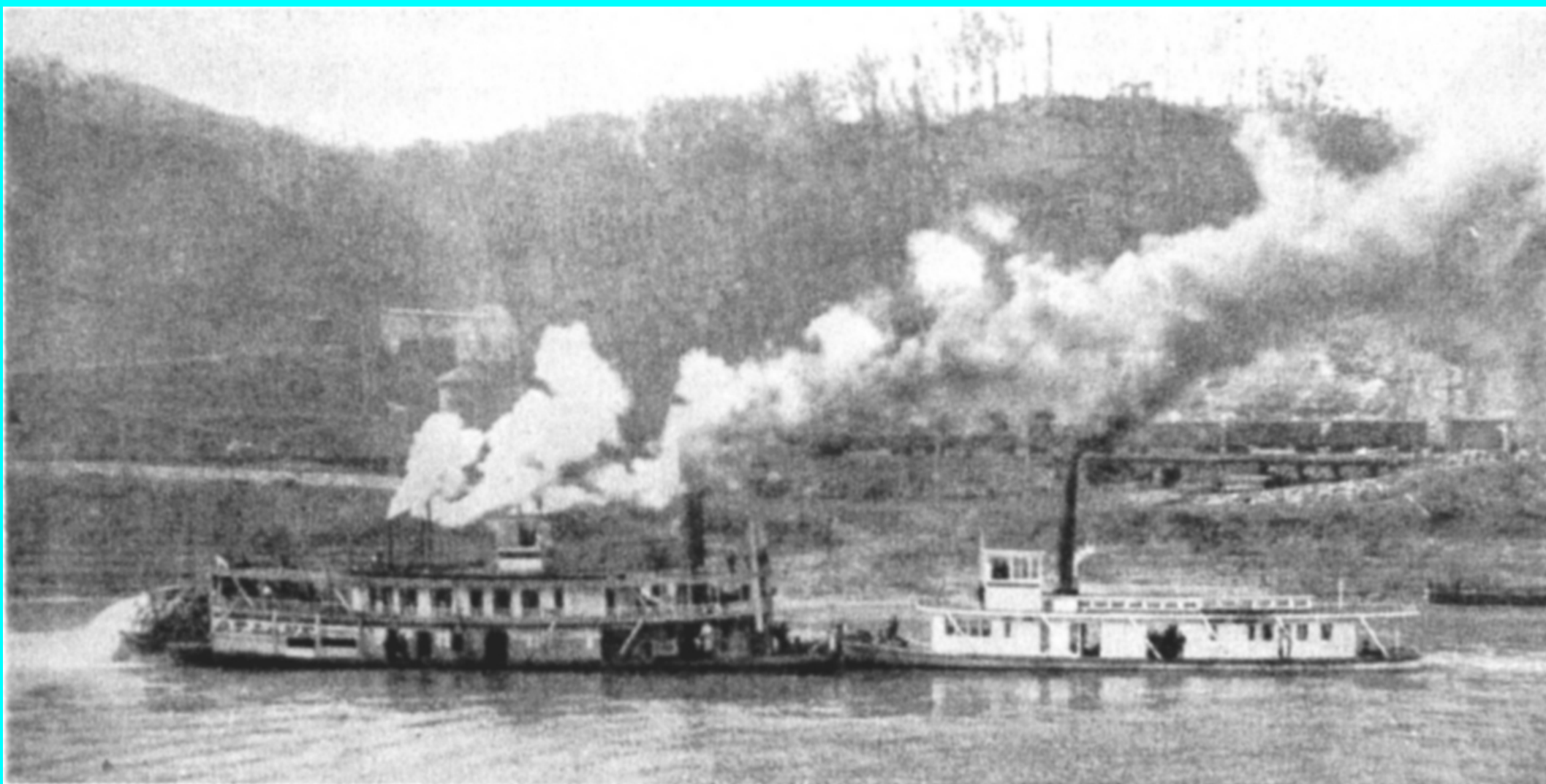




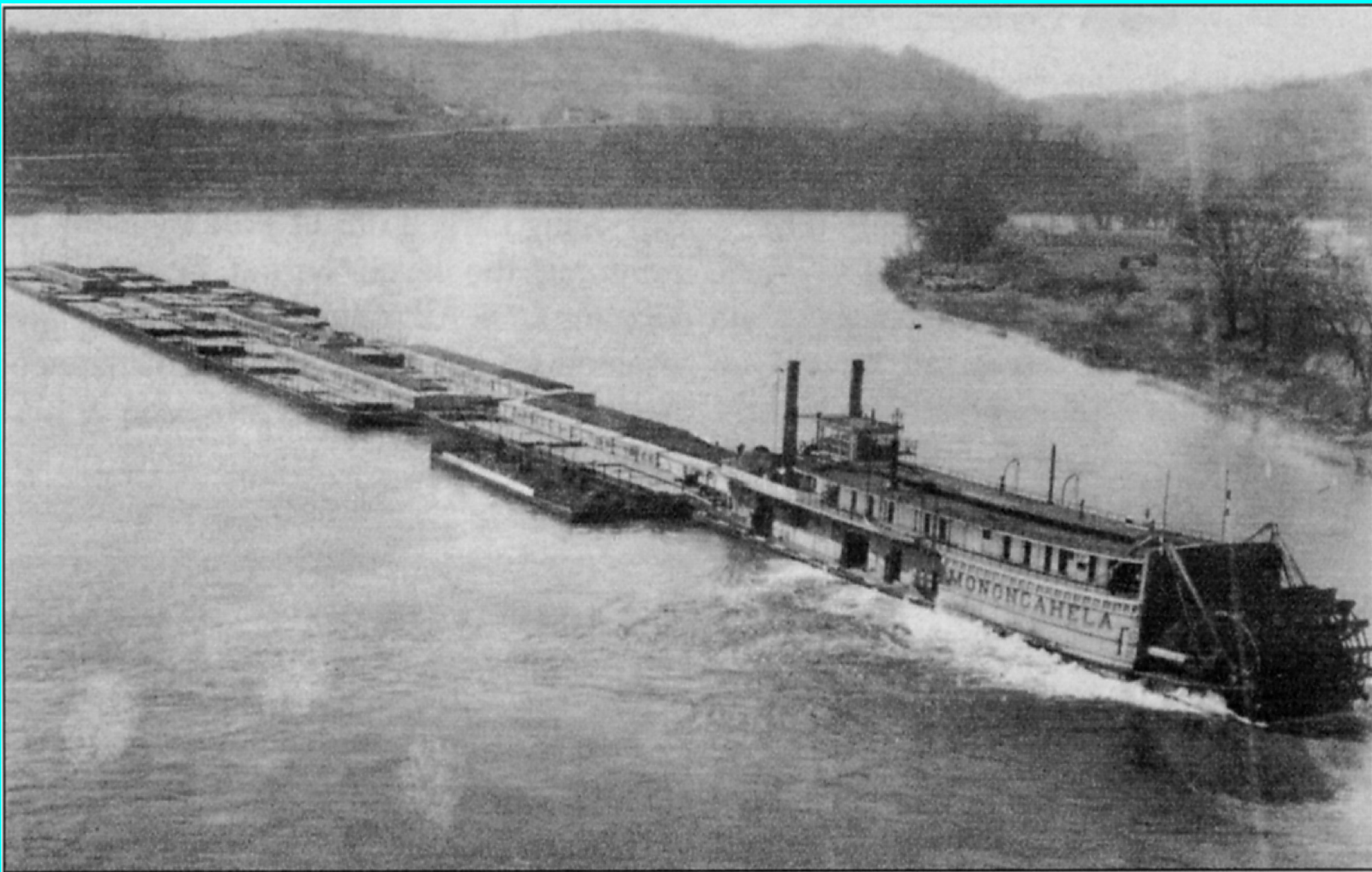


W.P. SNYDER JR.
PITTSBURGH PA.

W.P. SNYDER JR.



The big shoving match—stern-wheel D. T. Lane vs. propeller-driven James Rumsey. Ward Engineering - 1903 *From the Files of The Waterways Journal*



—U.S. Engineer Corps photographs



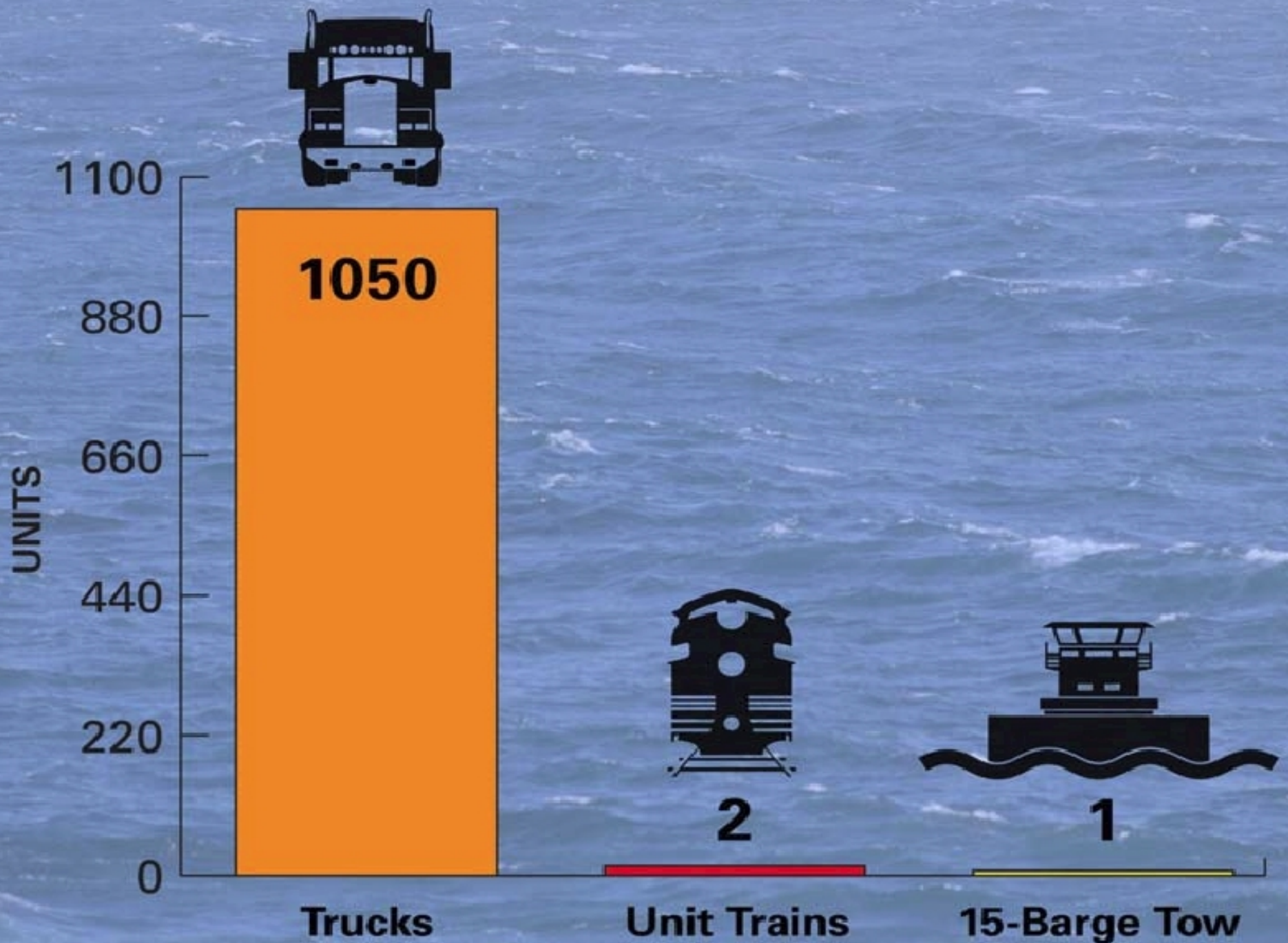
No Pilot Wheel? THE WATERWAYS JOURNAL January 24, 2011

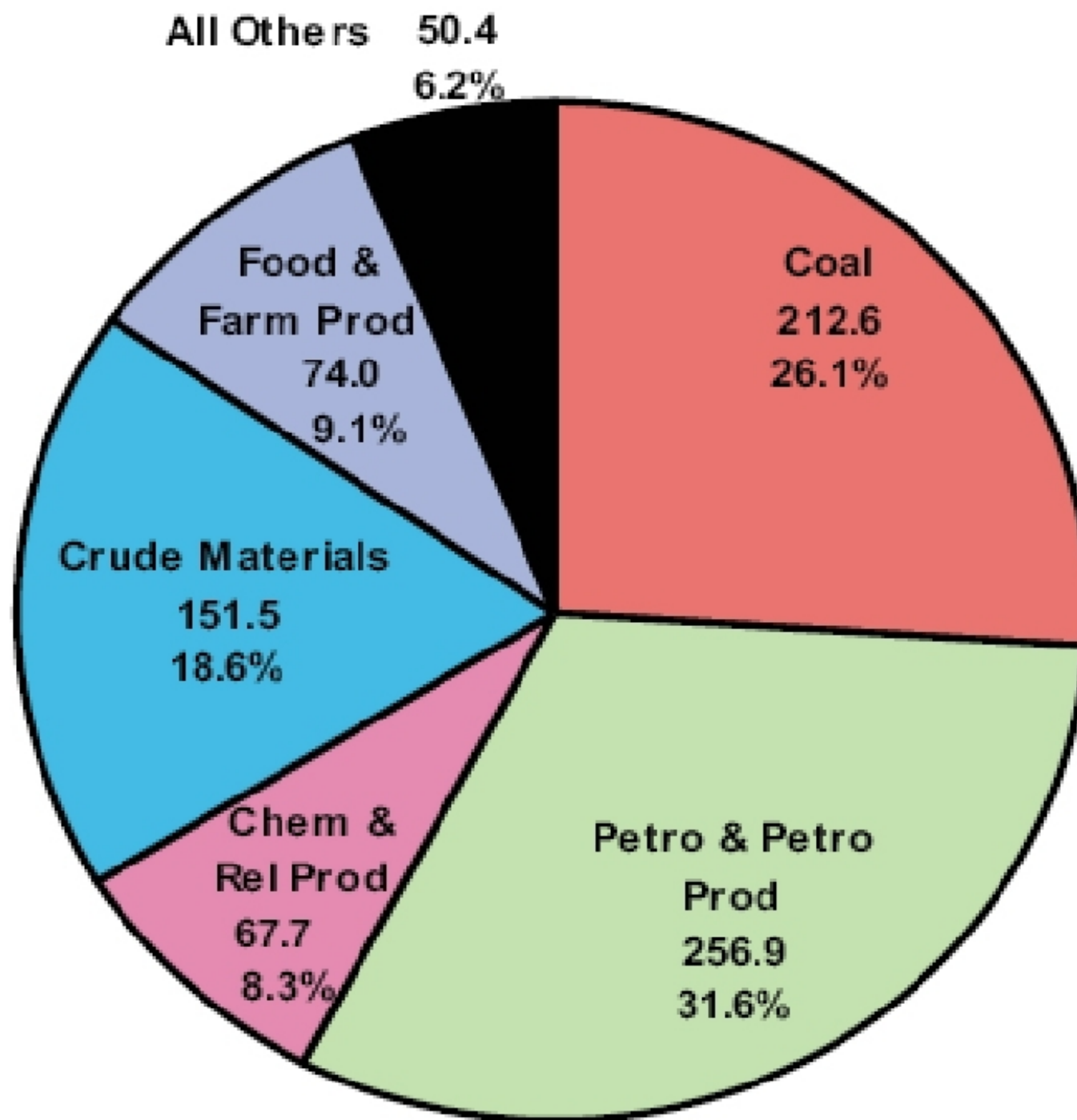
-All photos courtesy of the Howard Steamboat Museum -

The pilothouse had everything except a pilot wheel.



Cargo Capacity Comparison

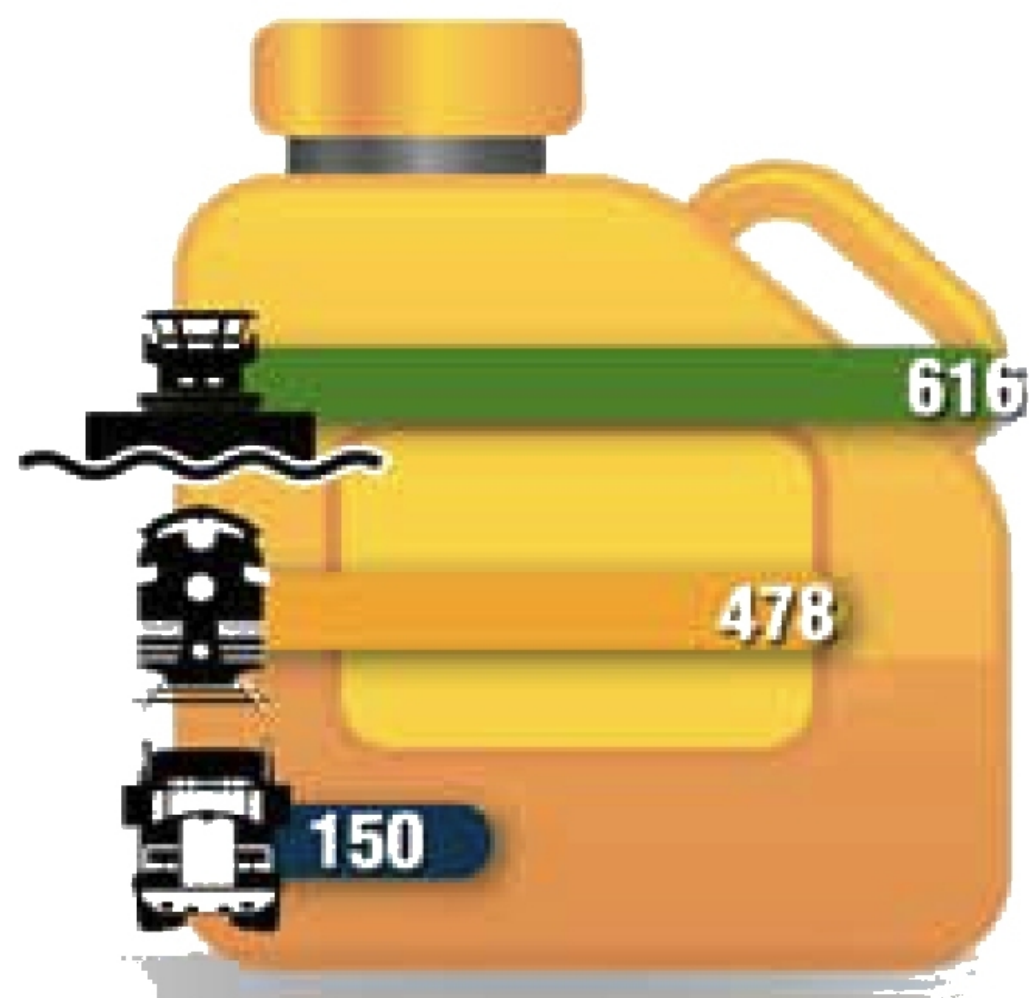




2005 Barge Traffic by Commodity Group (in millions of tons).

Moving Forward, Saving Energy

Transporting freight by water is the most energy-efficient choice.



The most energy-efficient way to move commodities such as coal, grain, iron, steel, aggregates, petroleum and chemical products is to use the nation's navigable rivers. Barges can move one ton of cargo 616 miles per gallon of fuel. A rail car would move the same ton of cargo 478 miles, and a truck only 150 miles.

Ton-miles Traveled per Gallon of Fuel

Ton-miles per ton of GHG

60,000

50,000

40,000

30,000

20,000

10,000

0

13,964.0



Truck

37,207.2



Rail

51,891.8



Inland Towing

Ensuring Cleaner Air

Inland waterways transport generates fewer emissions than rail or truck.

The emission comparison between inland towing, rail and truck transportation shows that fewer air pollutants are generated by moving products on America's inland navigation system.

These pollutants include:

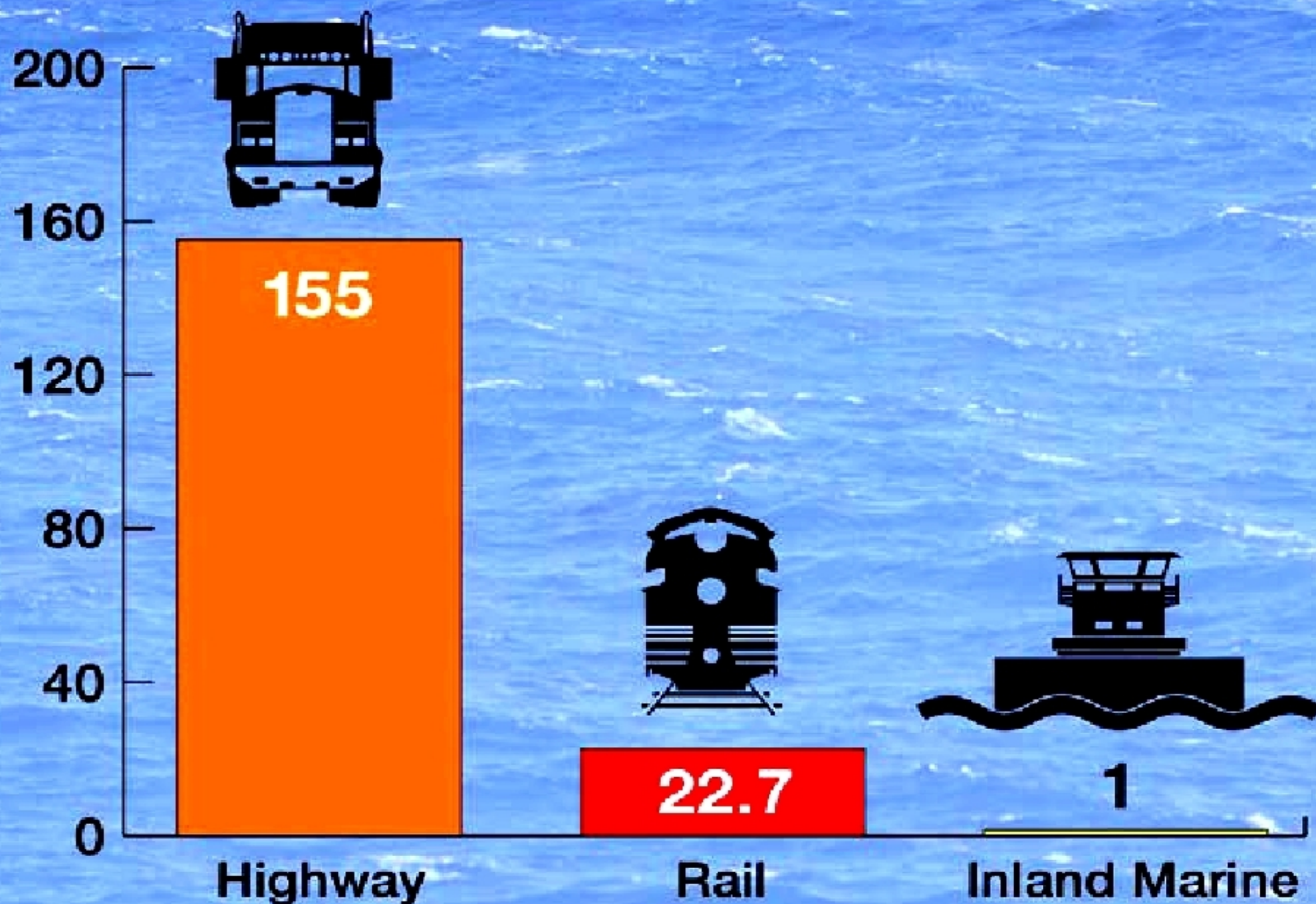
- Particulate matter (PM)
- Hydrocarbons (HC)
- Carbon monoxide (CO)
- Nitrogen oxides (NOx)

Emissions (Grams/Ton-mile)

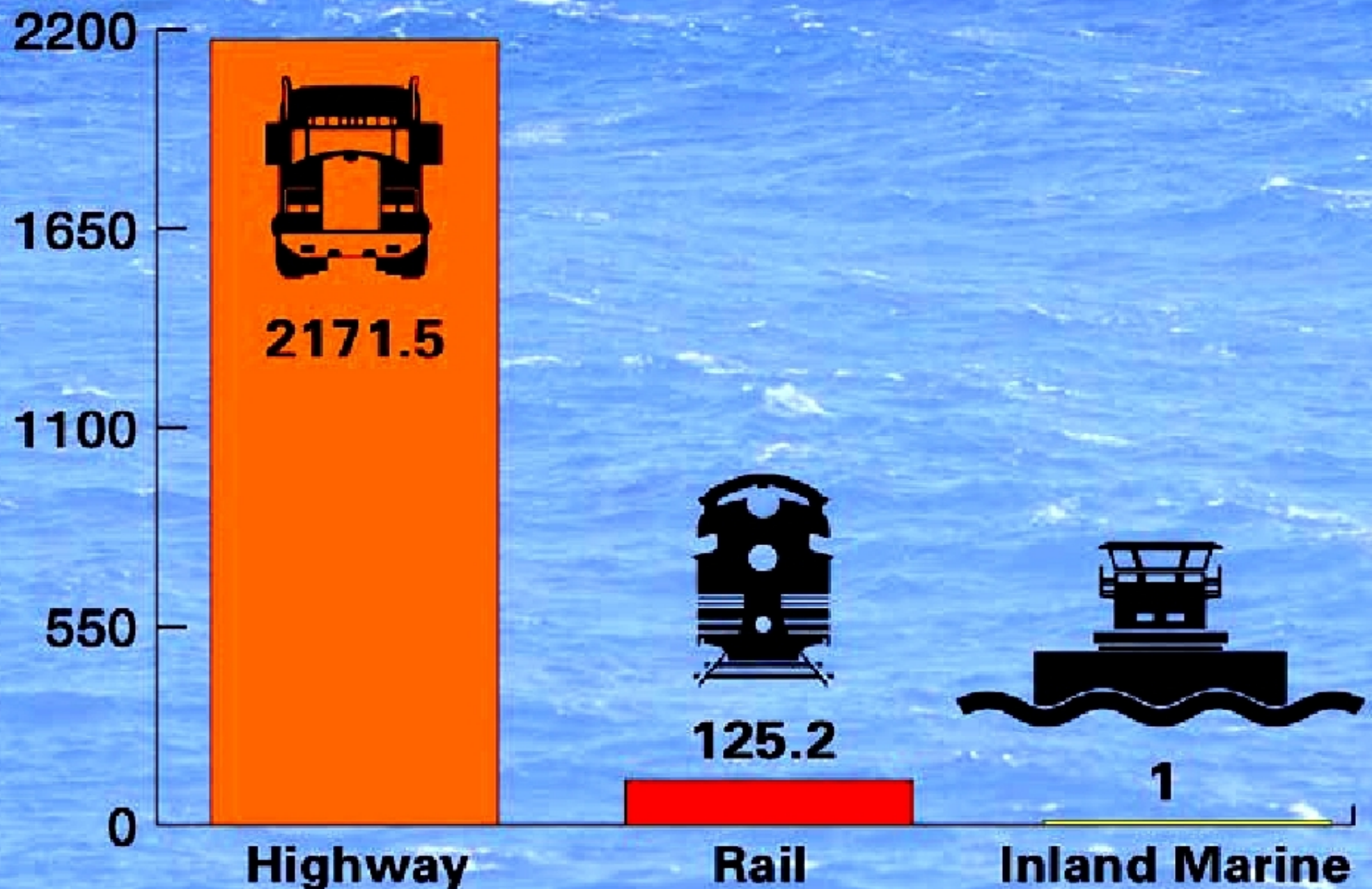


PM = Particulate matter ■ HC = Hydrocarbons ■ CO = Carbon monoxide ■ NOx = Nitrogen oxides

RATIO TO INLAND MARINE FATALITIES

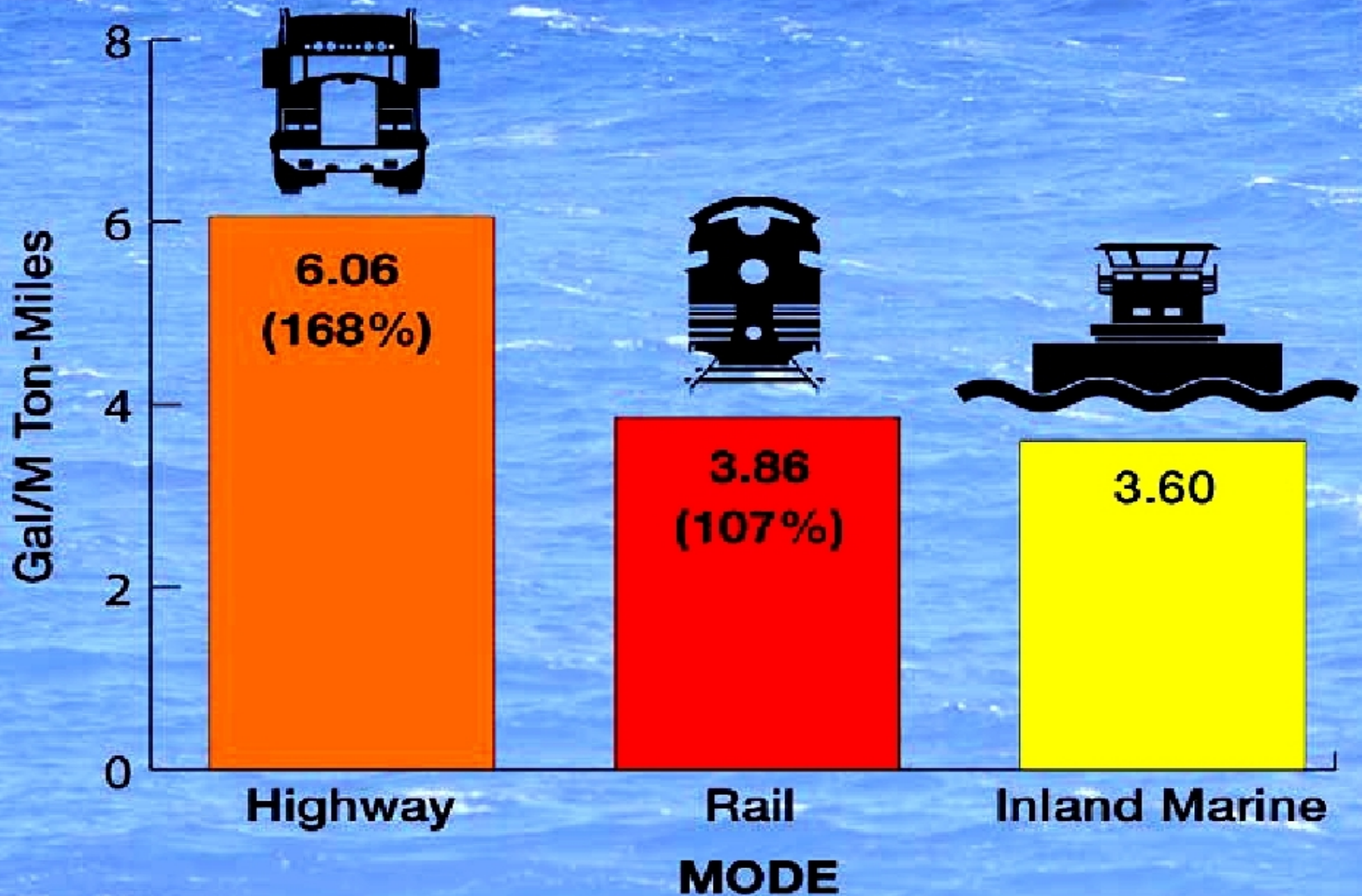


RATIO TO INLAND MARINE INJURIES



RATE OF SPILLS IN GAL/M TON-MILES

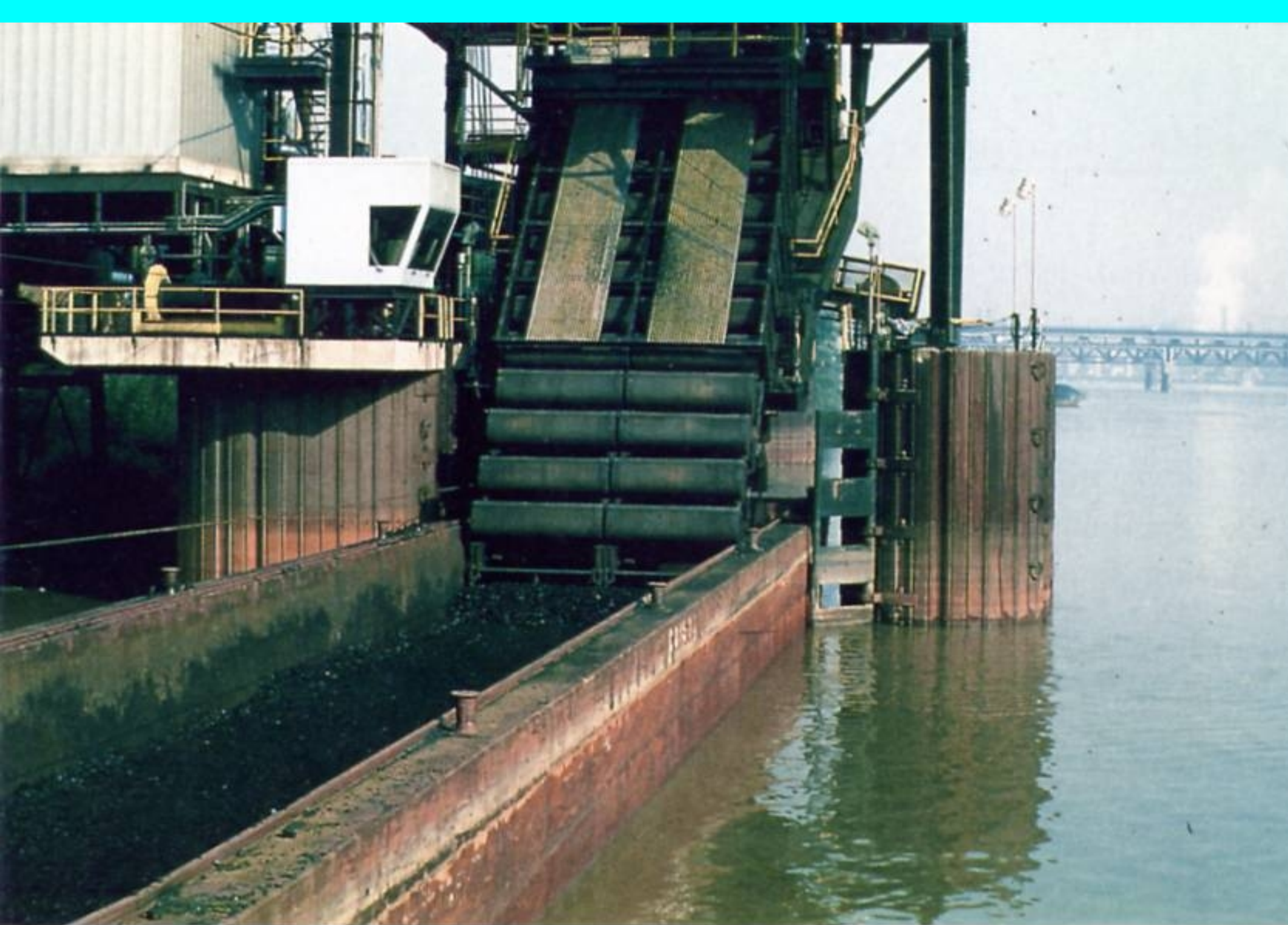
4-Year Average (2001-2004)











Union Railroad unloader at Duquesne.



Army Corps of Engineers, Tennessee-Tombigbee Operations Office

A tug and barge with two nuclear turbines, built in South Korea and shipped to New Orleans, transits a lock on the Tennessee-Tombigbee Waterway en route to the Sequoia power plant in Tennessee.





A tandem of two barges transports the center span of a bridge along a waterway in Germany.



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