

THE PENNSYLVANIA, THE LARGEST FREIGHT STEAMER IN THE WORLD.

The ever increasing size of the modern cargo steamer is shown by the proportions of the Pennsylvania, of the Hamburg-American line, which is now on the return trip of her maiden voyage to the port of New York. She is in some respects the largest ship in the world, not even excepting the Campania and Lucania, of the Cunard line; for, although the two passenger ships exceed the freighter in some of their dimensions, the displacement, i. e., the actual dead weight of the loaded ships, is less.

	Length.	Beam.	Depth.	Speed.
Great Eastern	Ft. 680	Ft. 83 $\frac{1}{4}$	Ft. 58	Knots. 11
Campania	600	65 $\frac{1}{4}$	43	22
Pennsylvania.....	560	62	42	14 $\frac{1}{2}$

At first sight it would look as though the extra 2 $\frac{3}{4}$ feet of beam and 40 feet of length of the Cunard boats would give them greater displacement, but it must be remembered that these boats are built for speed, and that the bulk of their underwater body is greatly reduced toward the ends, so as to give them a long, sharp entrance and delivery. Moreover, they do not draw so much water as the freighter, whose extreme loaded

for the lighter weight of the high pressure piston. Piston valves are used for the high pressure and intermediate cylinders and a D valve for the low pressure. Steam is supplied by three double ended and three single ended Scotch boilers, using the high pressure of 210 pounds per square inch. The engine and boilers were constructed by the builders of the ship, Messrs. Harland & Wolff, of Belfast, Ireland. They have proved to be highly economical, as may be judged from the fact that the coal consumption is only eighty tons per day for engines of 5,500 horse power. There are forty-five auxiliary engines scattered throughout the ship, among which are included twelve steam winches and eight steam cranes for handling the cargo—none too many, judging from the fact that they may be called upon to load or unload this huge ship in three or four days of twenty-four working hours.

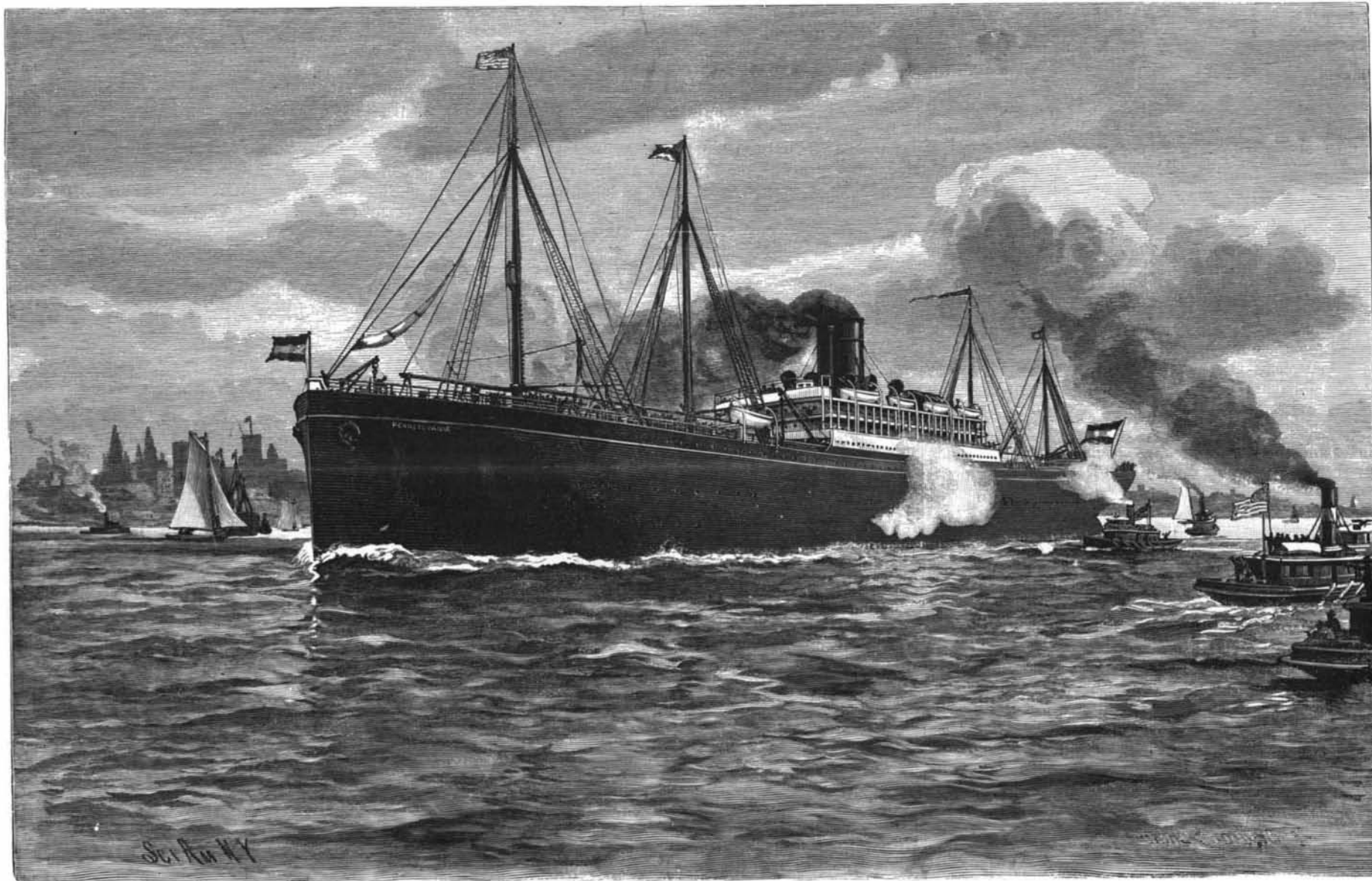
In addition to her enormous cargo capacity, the Pennsylvania has a large passenger accommodation, being able to carry 200 first cabin passengers, 150 second cabin passengers and 1,000 in the steerage. The passenger accommodations are arranged upon the main, upper, awning, saloon and promenade decks. The first class staterooms are on the awning deck and the saloon deck, with a few staterooms on the promenade deck. Forward on the saloon deck is the first cabin

this size it is impossible for the navigating officer to make himself heard, however stentorian his voice, over a ship that is nearly 200 yards long, and orders are signaled by "telegraphs" from the bridge and read by the officers forward and aft.

On her way out the new ship encountered very boisterous weather, and her officers speak of her as having all the proverbial stiffness of a rock, the only effect of the head seas being to reduce her speed, though the difference was far less than would occur in a ship of average size.

Liability of Owner of Realty for Accidents.

Truman A. Black recovered judgment in the Westchester County Court against Thomas A. Maitland, for injuries received in passing out of a store owned by defendant, by breaking through a platform constructed of iron and glass, which formed the approach to the door of the premises from the sidewalk. The Appellate Division in Brooklyn has directed a reversal. Justice Bradley, giving the opinion, holds that, as the premises had been occupied by a tenant for some years, and it did not appear that defendant, as landlord, undertook to keep them in repair, and there was no evidence that the platform was not in good condition at the time the tenancy com-



THE PENNSYLVANIA, THE LARGEST FREIGHT STEAMER IN THE WORLD, ENTERING THE HUDSON RIVER ON HER MAIDEN TRIP TO NEW YORK, FEB. 9, 1897.

Length, 560 feet; beam, 62 feet; depth, 42 feet; maximum draught, 30 feet; displacement, loaded, 23,400 tons; horse power, 5,500; speed, 14 $\frac{1}{2}$ knots.

draught is 30 feet. It has been frequently stated that the Pennsylvania rivals the famous Great Eastern in size, but a comparison of the dimensions of the two ships shows that the new cargo boat, big as she is, is yet a long way behind the leviathan of forty years ago.

The engraving which we publish of the Pennsylvania gives a correct impression of the imposing appearance of the ship as she made her way up the Hudson River on her first trip to this port. Large as her bulk appears above water, there is fully as much of it hidden from view below the water line. When she is loaded to her full capacity, her keel will be thirty feet below the surface of the water. She has eight decks in all, the lower deck, between deck, main deck, upper deck, awning deck—all five of these extending throughout the full length of the ship; and above the awning deck is a structure between two and three hundred feet long, in the center of the ship, which contains the saloon deck, the promenade deck, and the boat or bridge deck. The total height from keel to the boat deck is 72 feet, and when the boat is at her normal draught this last named deck will be 48 feet above the level of the water. The Pennsylvania is propelled by twin screw, quadruple expansion engines of 5,500 horse power. They are built on what is known as Schlick's patent, in which it is sought to secure a perfect balance by arranging the cranks at 100°, 100°, 100° and 60°, the odd spacing being adopted to compensate

dining saloon with seating capacity for 125 persons. On the after part of this deck is a handsome smoking room with accommodations for forty-five persons. There is a clear promenade space of 10 feet around the saloon deck. The promenade deck is exclusively devoted to the first class passengers, and as it will ordinarily be from 38 to 40 feet above the water, it will be a dry and comfortable spot in heavy weather. From its lofty height the passengers will never look in wonder up to the overhanging crests of the "mountainous seas," of which marine writers delight to tell, for the reason that they will be 10 or 15 feet higher than the tops of average Atlantic rollers. Careful observation has shown that the heaviest waves are rarely over 25 feet in height, whereas a person standing on the promenade deck of the Pennsylvania will be about 40 feet above the water when the ship is at her normal draught. When she entered the Hudson River her draught was light, and the boat deck, from which the navigation of the ship is carried on, must have been over 50 feet above the water line. It is this great height that deceives the eye as to her length, for no one unacquainted with her dimensions would suppose that she was but 40 feet shorter than the Campania.

On the boat deck, or bridge deck as it is sometimes called, is a long line of "telegraphs" for communication with the engine room and with the subordinate officers at each end of the ship. In handling a ship of

menced, or that defendant was advised as to its condition prior to the time of the accident, the defendant, as owner, could not be held liable. "Inasmuch as the place in question was no part of the sidewalk," says Justice Bradley, "and was not, apparently, open to use as such by the public, the owner or occupant was chargeable only for want of reasonable care to give safety to the use of this entrance into and from the building, and the burden was upon the plaintiff to prove the negligence of the defendant in that respect." — N. Y. Times.

Advantage of Sleep.

In reply to the question, Is it wise for a man to deny himself and get along with a few hours' sleep a day, to do more work? Tesla, the great electrician, is said to have replied: "That is a great mistake, I am convinced. A man has just so many hours to be awake, and the fewer of these he uses up each day, the more days they will last; that is, the longer he will live. I believe that a man might live two hundred years if he would sleep most of the time. That is why negroes often live to advanced old age, because they sleep so much. It is said that Gladstone sleeps seventeen hours every day; that is why his faculties are still unimpaired in spite of his great age. The proper way to economize life is to sleep every moment that is not necessary or desirable that you should be awake."