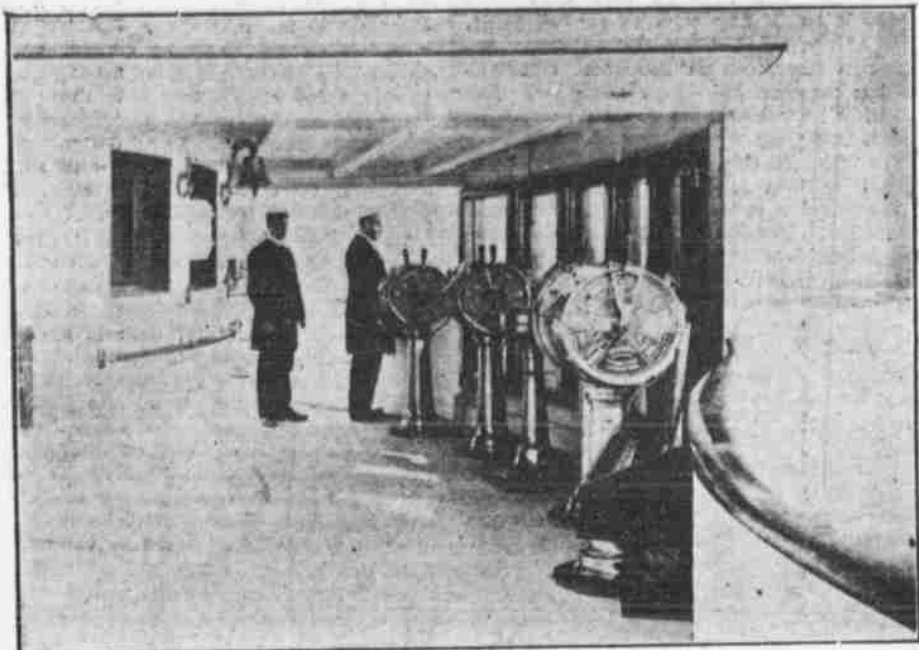


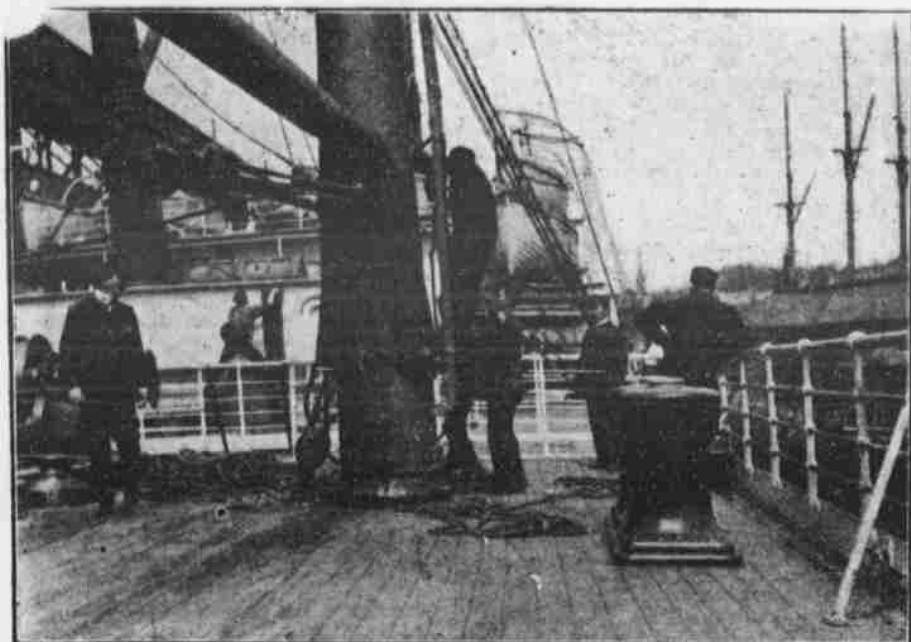
Handling an Atlantic Liner



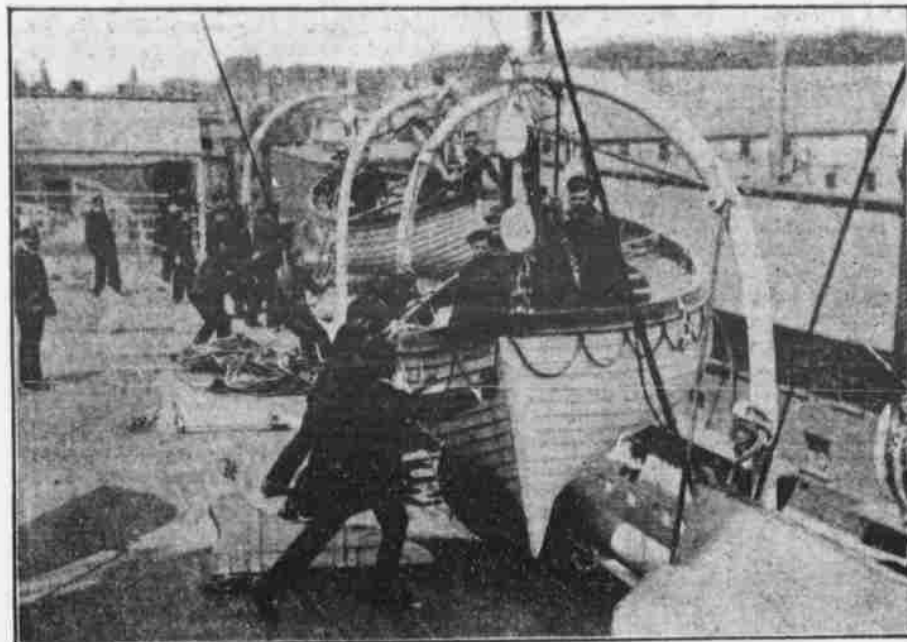
ON THE BRIDGE OF A LINER—THE CAPTAIN AND FIRST OFFICER OF THE STEAMER OCEANIC.



CLEARING UP THE DECKS.



STOW AND MAKE FAST—ALL MOVABLE PARTS ON DECK ARE SECURELY LASHED BEFORE THE BOAT GOES TO SEA.



A BOAT DRILL ABOARD A LINER—PREPARING TO LOWER AWAY FOR LIFESAVING DRILL.

NEW YORK July 14.—(Special Correspondence.)—Loud is the lament over the passing of the old-time sailor. The man of the tarry fist and the keen eye for the weather braces is gone, they tell us, from the great lanes of the ocean's commerce, driven to remote seas with the full-rigger, while stokers and oilers and cargo lumpers have taken his place on the great ships of the world. Many who manned the yards with him in the old days are prone to lament these degenerate times of steam, to mourn the departing glories of the skys'-yarder and to say with him: Permit a tarry sailor to shift his quid and sigh
As moping o'er his India link he spits, and pipes his eye

as the words of the old song have it. But, after all, it isn't so bad as it seems. The foremost hand on the liner today is, indeed, a painter and a scrubber of paint, but so he was on the full-rigger. To be sure, he does not have to man the yards in a gale, for there are no yards to man; but if he would rise in his position he will do well to have had some experience on a sailing ship before he joins the liner. Indeed, many of the transatlantic companies keep a ship for just that purpose—an old-time training ship, where one may learn the tricks of the canny sailor-man, the ways of the full-rigger, before he joins the liner's crew—just as the United States navy builds sailing ships to train men for its modern steam warships. The foremost liner captains of the day, the men who command the leviathans of the White Star line and the fast flyers of the American line, are, without exception, men who have served their time on one of the old full-riggers and are as well qualified to navigate a 1,000-ton, full-riggered ship to China as to bring the 20,000-ton liner safely into New York, Liverpool or Southampton.

The modern liner is, of course, first of all an engineering problem. It carries a chief and a corps of subordinate engineers who must know every pulse of the mighty engines that throb within its hull. These know to a dot the steam-making value of a pound of coal, the distance forward that every revolution of the churning screw will carry the ship, every rod and cog of the complicated machinery which comes between the two; just as the old-time topman knew the bewildering network of ropes and blocks and canvas that flapped and sang in the gale 100 feet above the reeling deck: All that a shore engineer in a great establishment must know, they know, and far more. They must be able not only to run the machine, but to repair it at short notice and on their own resources. To them must come the tinkering of a valve or a broken minor crank, or the shipping of a new propeller in mid-

ocean. Such is the engineering problem. But over and above this is the work of the captain and crew, who must be navigators and seamen such as the old-time merchant vessel could never have, simply because it never had such need of them.

The captain and the first and second officers must first of all be navigators and their problem is one which takes a quicker mind and greater judgment than did the working of an old-time merchant sailing vessel. They do not sail to all the seas of all the world, as did the clipper ship, but they must cross the stormiest sea in the world, the Western ocean, in schedule time and bring their thousand or two of passengers into port, howsoever the tempest blow or the fog shut down, or the fleets of the northern icebergs lie across the track. The old-timer could snug down and lie to for a day or a week if there was a cyclone tearing the sea in ribbons—the liner must push through it. To the sailing vessel captain the chill that warns of ice came many hours before the vessel could be in the neighborhood of the ice; to the liner it may mean only minutes. The captain of the ocean-going passenger vessel must be as weatherwise as his old predecessor of the sailing ship and for the problem of sails he has that of steam, which requires, on the whole, still greater seamanship. Take the one matter of the ship's position at any given noon-time. Never did the sailing captain, sextant in hand, watch for the sun through the flying scud of clouds as does the master of a liner. To the former his position could not have changed but a hundred miles or so; the latter knows that he is four hundred or more east or west of where he was yesterday noon, and his calculations of distance, direction and current must be so much the more keen if he would be safe.

Nor does a liner require less seamanship at the helm, but rather more, than the sailing vessel. The helmsman of the full-rigger steers by the compass, by the fill of his sails, by the feel of the sea on the helm. He has a dozen checks to help him keep his course steady. The steersman of the liner has only the compass. However great the strain on the rudder head, no notice of it thrills up into his hands. The wheel turns at a touch and the steam steering gear responds and takes all the strain. He has to keep true to the "inber point," but he can only guess what the waves and wind are doing to his vessel. He has no towering acres of canvass to watch, no feel of the send of the swell on the helm so that he may meet it or ease it up in time to keep the course steady. He must meet it and ease it up by the instinct of the thorough seaman, his eyes glued to the swaying needle, and only that



A TYPICAL SEAMAN.

instinct to guide him; and woe to him if it falls off a point. The liner is running against schedule time and must keep a straight course to make it.

Another man on the liner who is far more of a seaman than his prototype of the sailing vessel ever could be is the lookout. He reaches his perch eighty feet above the deck, through the hollow foremast, and there his duty is to see everything and report it. And this is no sinecure. His vessel is rushing through the sea at the rate of an ordinary railroad train, a mile every three minutes. Another liner, coming at an equal rate through the gray of a storm, must be sighted a mile away. Even then there is but half a minute to pass the word and get the response from the great ship in time to clear the danger. Hence much of the ship's safety at sea depends on the vigilance and keen sight of the lookouts, and these men are picked and trained with special care. Their eyesight must be perfect and their knowledge of lights and signals as good as that of the officers themselves. Two at a time are stationed in the swaying crow's nest, and you may often hear the little toot of a horn at night by which they announce a light sighted—one toot for a light on the port, two for one on the starboard, and three for one dead ahead. So keen is the vigilance of these men that often late at night

when the slender horn of the old moon pokes up in the clear east they note its very point and report it as a light, which indeed it is, though not one to be reported. So rapidly does the moon rise that by the time the officer on the bridge, in response to this report, has fixed his binoculars on the light, it is far enough up to be plainly recognized as the moon. But the lookout is never reproved for this mistake, which merely goes to show how vigilant he is. The position of lookout, even on this high perch, has its dangers, too—for, high as he is, he is not above the reach of the sea when the liner is plunging at full speed head on to a gale.

The old-time forms and titles hold good on the liner still. The captain is still the captain, of course. There are a first mate and second officer, a boatswain and boatswain's mates. There is "Chips," the ship's carpenter, and the port and starboard watch relieve one another on duty every four hours. Forward, the ship's bell, strikes the hours for these watches, dividing the time from 4 to 8 into two periods each afternoon, the "dog watches." Thus both terms and routine survive on the ship as well as the old-time seamanship on the part of the officers and certain members of the crew.

But how about the ordinary seaman, the deck hand? Is he not a scrub and a painter and a smasher of baggage?

He is, indeed. The break of day sees him out with bare legs and long lengths of hose spouting sea water on the decks and scrubbing them down from end to end of the ship. The noonday sun sees him with paint brush in hand touching up spots on the booms or painting down the mast or the deck houses where they will not smear the passing passengers. The day before the ship reaches port he is deep in the hold sorting out and hoisting up baggage and he piles it in heaps and rolls and tosses it about as the ship glides up to the landing stage or the pier. Sometimes that is all he is up to. He may be a dock laborer who has by some chance gotten aboard ship, but this is not often. Generally he is a seaman all through, a man who has served his years on sailing ships and has reefed topsails in all seas. Such men the liners are on the lookout for at all times and when they get them they hold them as long as they can, for the duty of the foremost hand on the liner is not confined to scrubbing and painting and handling of baggage. He must be able to handle the ship's boats and is regularly drilled in their management. He is familiar with the fire drill, too, and is exercised in it frequently. He must "know the ropes" and be expert in the handling

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