

The Knowledge Bank at The Ohio State University
Ohio State Engineer

Title: Shipping Out

Creators: Taylor, Henry

Issue Date: Mar-1929

Publisher: Ohio State University, College of Engineering

Citation: Ohio State Engineer, vol. 12, no. 5 (March, 1929), 8-9, 26-27.

URI: <http://hdl.handle.net/1811/34564>

Appears in Collections: [Ohio State Engineer: Volume 12, no. 5 \(March, 1929\)](#)

SHIPPING OUT

By HENRY TAYLOR, '29

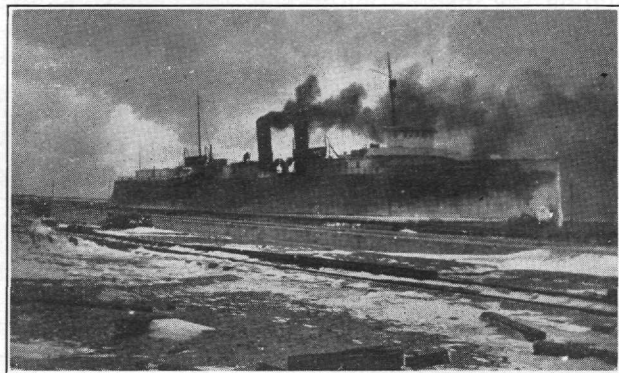
Never will I forget my first experience of working on a Great Lakes steam boat. To the last of my days, no matter what may befall me in the future, the first summer that I spent on the lakes will form a source of very interesting, and at times, yes, a good many times, very painful reminiscences.

Although my father is manager of one of the various ship lines which enters my home town, he would not permit me to go sailing until I had graduated from high school. At the time I did not know his reason, but it was apparent later. It seems that the hard physical labor which goes hand in hand with some of the more lowly positions on the boats, and which an inexperienced man usually gets, has an injurious effect on one unused to hard physical work; especially is this true for a young fellow who has not attained his full development. It may not be so much the hard work itself as the unfavorable conditions under which it is performed. In the boiler room the worst factor to contend with is the constant intense heat, which is ever present, produced by the fires. I remember that I often wondered at my father's attitude, for, as my home town is only of medium size, work for an inexperienced person was difficult to find. I disliked very much to spend the summer at home while several of my friends were having a fine time sailing on the lakes, or so I imagined.

After I had spent a year at college, and as the employment situation had not improved, I again approached my father on the subject of my going sailing. Somewhat to my surprise, and not a little to my consternation, for I had learned from my friends that the sailor's life was not all roses, he agreed to let me go.

Accordingly, he spoke to the chief engineer from whom he found out that there would be a vacant position the next trip that a certain boat made. Let me say here that my desire to sail was no longer a matter of romance but a case of earning a little money to assist in paying for my education.

The first step in my preparation was to purchase suitable clothing which consisted of several suits of over-alls, socks, leather shoes, gloves, and other miscellaneous articles. I also purchased a dollar watch, for, as some of the sailors are afflicted with light fingers, it is very unwise, usually, to carry an expensive time-piece on a boat. One might well wonder when I say that woolen underwear was included in my purchases. In the fire hole, where I was to work, the heat is very intense. Strange as it may seem, instead of making one insufferably hot, the woolens help to keep the heat out and prevent it from becoming too unbearable as would happen if a lighter material were used. They also absorb the perspiration, a great advantage to the workers in the boiler and engine rooms, who usually perspire continuously. After I had completed my purchases, I went to the Lake Carriers Hall to get my "book." This is a small book costing a dollar,



The Marquette and Bessemer No. 2

which, in addition to having a tabulated space for recording the duration of employment and positions held on various boats, shows that one belongs to the Lake Carriers Association. This is a protective institution for aiding disabled sailors, or their families in case of death or permanent injury. It operates somewhat on the same principle as an insurance policy.

Finally the boat came into port, and accompanied by my father I went down to the dock to meet it. I was introduced to the chief engineer who was to be my boss, and afterward shown to my bunk. As soon as I had cleaned it out, shaken the mattress which was stuffed with corn huskings and consequently none too soft, I set out on an inspection tour of the boat.

This boat was a car ferry named the "Marquette and Bessemer No. 2." There are two types of boats used for lake transportation (outside of the passenger and freight trade), the ore boat and the car ferry. The ore boat carries iron ore in the bulk form and the car ferry carries the railroad car itself in addition to its contents. This particular boat was 350 feet in length, 56 feet wide, stood 50 feet above the water line when empty, and slightly lower when loaded. It accommodated four railroad tracks on its lower deck called the "car deck." The upper deck was used for the crew's quarters, mess halls, and several passenger cabins. The rear or "after" end of the boat was open to permit the railroad cars to be shoved on. This car deck was high enough above the water line that the water could not enter. It carried thirty cars at a time, two strings of eight cars each and two of seven each. When the boat was to be loaded or unloaded, it would back up to a fan-shaped arrangement called an "apron." The apron was hinged on the land side so that it could be raised or lowered to meet the level of the car deck. The operation of reversing the direction of the boat was comparatively easy. It was a "twin screw" boat, that is, it had two propellers, one on each side. By turning one engine full speed ahead and the other full speed in reverse, the boat could be slowly twisted around in a space a little longer than its length. This was a big advantage, especially when the harbor happened to be well filled with boats. After the apron was properly fast-

ened, the locomotive would advance slowly until it could be coupled to the cars which were then drawn off, string by string. After the new cargo was loaded, the mooring lines and apron fastenings were unloosened, the mate pulled twice on a whistle cord located on the car deck and the boat started for the opposite side of the lake. Once, the mate, who was almost as broad as he was high, pulled a little too hard on the cord and it parted. His immediate contact with the hard iron deck didn't help to improve his temper to any great degree. The route that the boat followed was almost directly across Lake Erie, the trip across being made in four hours and fifty minutes. The entire trip, over and back, took eleven and one-half hours, allowing an hour and a half for loading and unloading. It was capable of developing a speed of fourteen miles an hour, but except in case of emergency, an average speed of ten miles an hour was maintained.

As soon as the boat started, I asked the chief when I was to go to work and he informed me that it would be twelve o'clock. The men in the fire hole work for a three hour interval and then are given six hours for rest or sleep if they can get it. For instance, one man may start at twelve, work until three, then he has six hours of leisure before he has to return at nine, when he is on duty for another three hours. Sometimes he starts at six in the morning and perhaps the next time at midnight. It was some time before I could become accustomed to getting up from my bunk at midnight to shovel coal, for that was what I had to do.

The fire hole of the boat, the room in which the boilers are located, is below the water line and the space where the men work is about the size of the living room of the average residence. To enter the boiler room it is necessary to descend an iron ladder from the car deck, the opening above it is scarcely large enough for a good-sized man to squeeze through. The boiler room itself is lined on two sides with boilers, the other two sides having the openings through which the coal is taken from the coal bunkers. There were four boilers each of which contained three fire doors, making a total of twelve doors, six on each side of the boiler room. In each watch, the name given to working time, there were two firemen and two coal passers on duty. The coal passer shovels the coal from the bunkers to the center of the fire hole floor where it is more accessible to the firemen. The coal passers also have to shoot the ashes. This is shoveling the ashes which accumulate from the fires into a box-like affair from which they are forced by steam power through an opening in the side of the boat. When the fires are cleaned, the bed of coals is pulled from the fire-box out on the floor with a hoe. A hoe is a long iron rod with a metal bar on one end. The coal passer throws a bucket of water on the red-hot coals so that his fireman may get closer to the fire-box. The work is hard and the coal dust soon changes one's complexion quite a bit. The temperature in the boiler room is usually of such an intensity that one is chilled on leaving it to enter the heat of a mid-summer sun. The grates in the fire boxes are approximately eight feet in length and five in width. The fires consume somewhere in the neighborhood of a carload of coal a trip or about fifty tons every eleven hours of running time. There is some vari-

ation in this amount due to the fact that some firemen fire heavier than others and also to the quality of the coal used.

The crew is composed of 42 members. This includes the officers, the captain, two mates, and three engineers. The men are divided into two groups, those who work in the forward end and those who work in the engine and boiler rooms and stay in the after end. For some mysterious reason, the men who work in the different ends are not the least congenial in their relationship. There seems to be an unwritten law that the men from each end stay where they belong. On some boats, there is a constant feud between the two groups, and there have been many bitter physical combats in which the officers usually see fit to interfere. As watchful as they are, all cannot be stopped.

The sailors have various means to pass away the time, some of which are their own invention. There is usually a card game in full swing but as gambling is against the rules of the company, there is a heavy penalty imposed on any one caught. For the more active and ambitious there is boxing, wrestling and competitive "strong arm" feats. It is surprising to see what some of those men hardened by a life of hard labor can do. One assistant engineer, a Dane, by the name of Thomson, put a plate on a boiler by himself, a feat which usually takes the combined efforts of two strong men. This engineer, who stood well over six feet and weighed over two hundred pounds, was a great practical joker. Later in the summer I was sent to the engine room and had him for a boss. Well I remember one time after a swim in port from which I had acquired a bad case of sunburn, that he came up behind me and gave my shoulder a resounding whack with his hand. It made me so mad that I had serious intentions of "cleaning up" on him and I told him so. Big Chris just stood there and laughed at me and soon I was laughing too. A good thing that he didn't take me seriously for one blow from those ham-like fists would have knocked me almost through the side of the boat.

I remember two of their diversions which struck me as being unusual. They would take a long, stout piece of cord, tie a small bit of meat to each end, and then throw it in the water. Soon two sea gulls would get it, one would swallow one bit of meat, and the other bird would swallow the other. Soon both birds would be up in the air squawking and screaming for dear life; they lost not a few feathers in the struggle. It certainly was a funny sight for the men but hard on the

(Continued on Page 26)



A Part of the Crew in Play Togs

SHIPPING OUT

(Continued from Page 9)

birds. Another of their tricks was to catch a small turtle and tie to its tail a cord with a small piece of wood attached. The turtle would dive and take the wood with it, and the men would place bets as to where the wood block would next appear.

A summer on the lakes furnishes a source of interesting experiences and information, but it is a hard life to follow for a living and soon takes its toll.

MARCH, 1929



L. C. SIMPSON,
Headquarters Sales,
U. of Colorado, '25



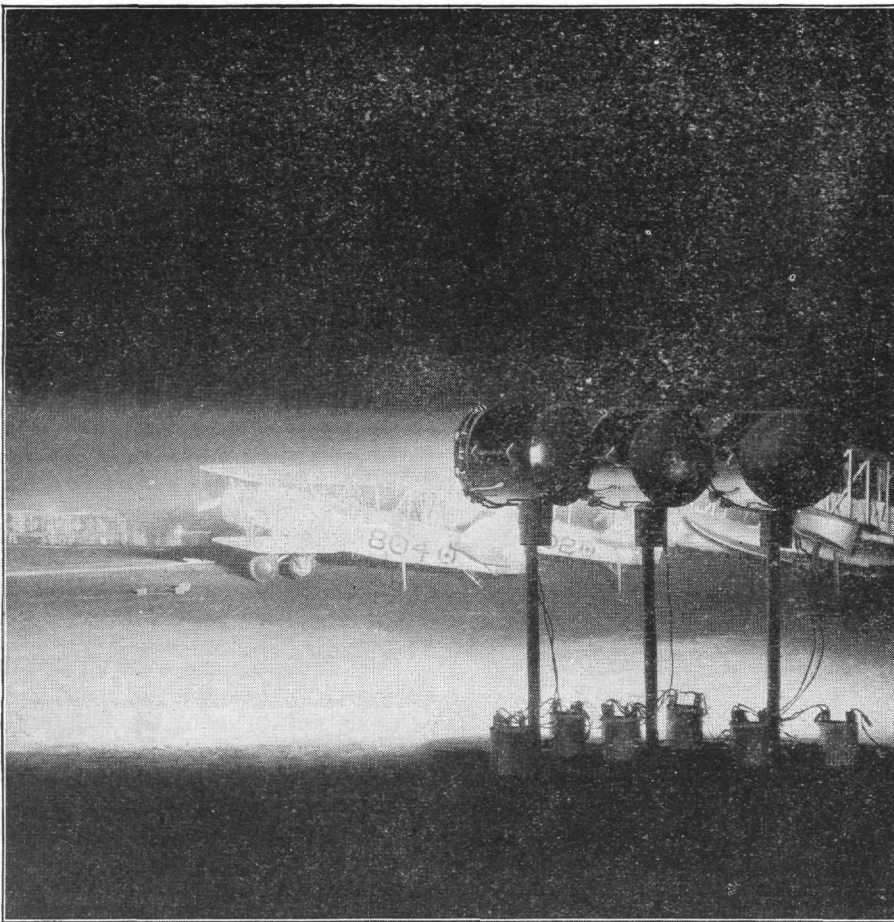
J. E. MOORE,
Headquarters Sales,
U. of Illinois, '25



L. J. CAHILL,
Lighting Engineer,
U. of Akron, '26



R. W. BUSH,
Commercial Lighting
Specialist,
Los Angeles Office,
U. of Southern
California, '24



YOUNGER COLLEGE MEN
ON RECENT WESTINGHOUSE JOBS



H. E. LIPPMAN,
Lighting Engineer,
Penn State, '25



I. A. YOST,
Lighting Engineer,
Penn State, '24



F. C. WINKLER,
Lighting Engineer,
Notre Dame, '18



JAMES D. REID,
Lighting Engineer,
U. of Indiana, '27

The Mines Field Illumination

Where do young men get in a large industrial organization? Have they opportunity to exercise creative talent? Is individual work recognized?

MINES FIELD, Los Angeles, is famous as the scene of the 1928 International Air Races and Aeronautical Exposition. Equally famous among flyers is the perfect illumination which enabled pilots on the night programs to land with all the ease and assurance of those who did their flying by day.

To blanket the field with brilliance and yet avoid dangerous glare was the problem assigned to the Westinghouse engineers who designed the Mines Field lighting for this greatest of air meets. Twenty-one huge floodlight projectors, each with a maximum beam candlepower of one million, provided the brilliance. An ingenious system of

louvres cutting off upward rays of light provided protection from glare. The result was an achievement in airport lighting which has been pronounced the most nearly perfect of any in the United States.

The outstanding jobs go to organizations with the resources and facilities to handle them. Westinghouse, because of the outstanding opportunities which are of almost daily occurrence within its organization, offers strong attractions to young men of enterprise and ability.

Westinghouse

