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Work and the Human Condition
Annotated Bibliography
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The following bibliography is an extensive listing of informative sources all relating to the topic of: "Labor in the Shipbuilding industry of the Pacific Northwest." While several sources deal only with Ships themselves, all are relevant to the laboring and laborers beginning in the 19th century.

Beard, Dan. Boat Building & Boating. New York: Dixon Price Publishing, 1911.

An illustrated guide to building a sailing vessel, this text allows one to understand all the necessary steps in making a working watercraft. From planing the wood into the right shape to caulking for leaks, this outline provides information on how ships were made over the centuries and how to make one yourself. This book has no information on actual workers, but instead gives a hypothetical model for building one's own ship so the reader can appreciate the time and effort that crafting such a vessel includes. The use for such a document, depends entirely on the reader.

Census of Manufacturers. Ship and Boat Building Railroad and Miscellaneous Transportation Equipment. U.S. Dept. of Commerce, 1992.

For one researching the condition and circumstance of laborers and workingmen/women in the shipping industry, this is not a desirable source. This record includes a vast account of the spendings, employment, and production of the ship building industry. Any personal information or working condition is not included, but if interested in the analysis of the American Ship Building Industry as a whole this would be an invaluable document.

Chapelle, Howard Irving. The History of American Sailing Ships. New York: Bananza Books, 1935.

This hefty book reveals a tumultuous culture in American ship building. Starting from colonial times, Chapelle provides a chronologically accurate recording of how and why shipwrights adapted

and expanded their business. As differing occupations took to the seas, ships changed to satisfy the needs of privateers, fisherman, merchants, and commodores. This book provides true insight to the face of American Shipwrights and how every worker and supervisor was effected by their times.

Chapelle, Howard Irving. The Search for Speed Under Sail. New York: W.W. Norton & Company Inc., 1967.

The shipping industry is obsessed with expedience so it is no surprise that the search for the fastest ship generated excessive funds over the generations. Chapelle writes a nicely compares and contrasts these vessels in a neat little summary; insightfully explaining the nuances and techniques each builder attempted. However, the unsatisfying conclusion is that a fast ship is born from a competent crew and favorable winds, making Chapelle's book a pretty read, but only if one is particularly interested in the faster schooner or "clipper" ships.

Dodds, James, and James Moore. Building the Wooden Fighting Ship. New York: Facts on File Publications, 1984.

Dodds and Moore include and explain the twenty-six different trades that went into shipbuilding, from caulkers and joiners to locksmiths and coopers. This book has charts of how many worked how long and their average daily wage, along with how much the heads of each position made and their responsibilities. Describing how each position worked in relation to each other, the authro succeeds in painting a vivid picture of the intricacies of managing a shipyard. There are sketches and pictures of many of the tools and equipment used to build ships and to be installed in ships. Also included are numerous charts of the prices, lengths, weights, needed men, and even the types of wood for each section or piece. This book is a quality recording of the above information and would provide an excellent source for anyone interested in Ship Building.

Gaasbeek, Van. Wooden Boat and Ship Building. Brooklyn: Pratt Institute, 1941

In response to the time's growing demands for textual information on building one's own ship, Gaasbeek composed this compact book which outlines every concievable event necessary to complete a wooden ship. From ship blueprints (plates) to raising masts, any step requires woodworking or carpentry is included. Gaasbeek also includes

photographs of men and women in the process of creation, so that the reader may understand exactly what is required. Although Gaasbeek does not include the information concerning the sails or rigging, anyone interested in the labor and processes of how trees are made into watercraft would surely benefit from this title

Gardner, John. Building Classic-Small Craft. Camden, Maine:

International Marine Publishing Company, 1905.

If one had the time and resources, a working, masted sailing ship could be made under the guidelines of this text. Similar to the above entry, Gardner presents a working manual on the makings of a wooden ship from the 19th century. What makes this book so fascinating is that the manual is based on techniques used in centuries past, and shows images of modern shipwrights completing a process that is virtually extinct. Unlike Gaasbeek's, this book uncludes the rigging and sailmaking process as well as the carpentry. From shaping to joining the wood, there isn't much left uncovered in this all-inclusive window to thi century old praticce.

Garvey, Robert. To Build A Ship. Crawley, West Australia: University of

Wester Australia Press, 2001.

Of all the instructional texts on Ship Building, I believe this to be the most impressive. Aside from the aesthetically pleasing colored photographs and organization, no book reaches such detail and involment with the construction of the ship. Explaining the chain of command in the building process, a handful of men recreate what used to be done by hundreds in American shipyards. From the panelled hull to the sculpted figurehead, each piece is manipulated and joined with the same intense concentration. This text shares a singular experience that mirrors what so many laborers face in a shipyard.

Gibbs, Jim. Windjammers of the Pacific Rim: The Coastal Commercia

Sailing Vessels of Yesteryear. West Chester, Pennsylvania.: Schiffer

Publishing, 1987.

The book describes the leading men who traveled west and built ships in San Francisco and Puget Sound, but it does not include detail about the working conditions of those under them. There are accounts of the efficiancy of each sailing vessel as well as the transfer of power when an owner died, but there are few details about how ships were built

besides how many men were employed for each vessel. While full of pictures, they are rarely of notable value. The information could be useful along with other accounts of working conditions in the Pacific Northwest, but the book is not impressive on its own.

Goldenberg, Joseph. Shipbuilding in Colonial America. Charlottesville, University Press of Virginia, 1976.

An intelligently detailed book regarding the foundation of all American shipbuilding (before the Pacific Northwest was really populated), the book offers clear explanations of how colonial shipwrights took and applied the knowledge they gained in England. The Americans built ships faster through the use of slaves and used the opportunity in the colonial system to become wealthier and more politically connected than English shipbuilders ever could in their parliamentary monarchy. The book also details the change in shipbuilding methods, with changes allowing for larger sails and thus larger ships that could carry more and increase the reward of using ships for trade. Already a wealth of information, Goldenberg also includes the information on the workers' condition in the shipyard and how that was attributed to by their employers

Gougen, Meade. The Evolution of Moder Sailboat Design. New York: Winchester Press, 1973.

This book covers a vast amount of information concerning ship building, making it ineffective to the researcher of specifics. However, it is not altogether useless. Starting from ancient Rome and Egypt, Gougen intelligently explains the differences in technique and philosophy behind the two countries' watercraft. Moving on, he relates this information to modern American shipwrights and their continuing improvements in the 19th and 20th Century. While general labor is not highlighted in this book it gives meaningful insights as to why and how American shipwrights have evolved and innovated their carpentry, rigging, and sails.

Grays Harbor Motorship Corporation. Ship Building. Washington State History Museum, Tacoma, 2009.

This photograph depicted men and women posing in front of a gigantic unfinished ship resting in the shipyard. Congress exempted shipbuilders from military service so shipyards like Grays Harbor in Portland tripled their employment within a year. Freight steamers built by the Skinner & Eddy Corporation replaced horses in the shipyard as

heavy loads could be moved by machine. This shipyard employed: clerks, purchasers, bandsaw workers, planers, framers, joiners, shipwrights, fasteners, carpenters, caulkers, blacksmiths, boilermakers, machinists, coppersmiths, plumbers, pipefitters, and painters.

Grays Harbor Motorship Corporation 1919. Ship Building. Washington State History Museum, Tacoma, 2009.

A neighboring photograph depicted a large completed ship leaving the yard. Aberdeen Douglas-fir was light, strong, and abundant. With 11 mills producing 2 million board feet in a week, Grays Harbor had potential to be one of the greatest shipyards in history. To establish themselves as a competition, Grays Harbor completed 290 foot, 4,000 ton S.S. Aberdeen in only 17 _ days.

Greenhill, Basil. The Mercahnt Sailing Ship: A Photographic History. New York: Praeger Publishers, 1970.

No ship is exactly alike, making the variety and quantity of sailing vessels almost incomprehensible. Therefore, Greenhill has cataloged the photographs of watercraft through the ages into this extensive photography book complete with informative captioning. Aside from the multitude of ships included, Greenhill also includes photographs of shipmasters, dockworkers, sailors, and middle management at work. In order to understand the nature and visuals of the ship undustry, this book is priceless.

Hall, Henry. Report on the Ship-Building Industry of the United States. Washington, Government Printing Office, 1884.

Many sources provide information on happenings in the 1800's but few present first-hand knowledge. This text provides a comprhensive statistical listing of all shipyards in the U.S. as well as recordings of the ship names that were constructed in each. This report also includes lists of the contents in a shipyard and an ingredient guide, of sorts, to building a ship. However, what makes this source so relevant is its in depth information on private shipyards and their employees. Governments offered very little to support shipwrights so each had private investors and vast amounts of employees. A yardworker's job varied according to the immediate ship: steam ships had to be handled and maintained much differently than ordinary sailing ships, merchant ships were far distinguished from military ships, and so on and so forth.

The life and labor of a ship builder is documented firsthand in this gem of a source.

Hutchins, John Greenwood Brown. The American Maritime Industries and Public Policy, 1789-1914. New York: Russel & Russel, 1969.

This extensive volume is invaluable to one interested in the administrative aspects of the shipping and shipmaking industry. Hutchins has compiled a vast documentation of the innerworking of the industry as a whole from politicians to their decisions, no stone is left unturned as the author explains the major conflicts and windfalls of the industry and how it grew and spread to the West Coast. While intimate information on the average laborer is not included in this book, it is a staple for one who wishes to understand the motivations and risks of ship builders through the ages.

Jennings, John Edward. Clipper Ship Days: The Golden Age of American Sailing Ships. New York, Random House, 1952.

Similar to Chapelle's The Search for Speed Under Sail Jennings' title is more a book of nostalgia than actual content. There are accounts of the conditions on board the watercraft, but the extent of its relevance to Ship Building is the knowledge that Shipwright owners cared little for their workers until the workers began to leave, and that West Coast shipyards were boosted by the Gold Rush. Other than that, this is not a richly informative text.

Papers from the symposium on the American Wooden Shipbuilding

Industry sponsored by the Bath Marine Museum. Wooden Ship Building & Small Craft Preservation. Preservation Press: National Trust for Historic Preservation, 1976.

This text reveals how the knowledge and mastery of shipbuilding was preserved through generations. Because master shipwrights would not sell or share their knowledge with the public, their sacred trade knowledge would be passed down to apprentices who improve and pass the information to the next generation. Also included is a detailed synopsis of a shipyard and its necessary contents. The author includes information on the employees, organization, and geography of the shipyard and explains the careful planning and movement involved in its

day to day activities, making this a text extremely valuable to one researching how ships were and are built.

Sucher, Harry. Simplified Boat Building, New York: W & W Norton & Company, 1974.

Tackling the vast and growing category of ship classifications, Sucher has compiled an extensive listing of differing ship models over the ages. Complete with illustrations and historical background information, there are few texts as inclusive. Sucher does not include information on the ship builders, but instead gives an archive of the immense variation in watercraft and why each was built for its specific purposes. Any reader interested in ships would take great knowledge and enjoyment from this book.

Taylor, Isaac. The Ship. Boston: Carter, Hendee & Company, 1834.

Similar to previous entries, Taylor provides a detailed manual to building a wooden ship. Taylor also covers the relationship and powershifts that inhabit the average shipyard. From master shipwright, to apprentice, to manual laborer, the ship making process is a fluid compilation of ideas and decision making. However, laborers on every level harbor a great deal of pride for their work, as is explained in the text. Taylor includes a portrayal of the disembarking ceremony of the ship from its shipyard, and the emotions carried and released by every worker included. This would not be a useful source for researchers of ships in general, but for information on the actual creation of the ship, this text would be very useful.