

**Salmon Canning in Oregon.**

Astoria, at the mouth of the Columbia River, Oregon, was founded by John Jacob Astor as a fur trading post in 1811, and his enterprise, at that day and for many years afterward unique, was celebrated in a volume written by Washington Irving. The location has become the great salmon canning depot of the Pacific coast. The business was begun in 1867, and in the first year 1,000 one pound can cases, containing 48 cans each, were put up for the market. Now, according to a correspondent of the *New York Times*, there was sent east last season 282,000 cases of salmon, which is expected to be increased next year to 300,000 cases, making 11,200 tons, or 1,000 car loads to be sent over the newly opened Northern Pacific Railroad. During the last season 153,600 tons of salmon were packed at Astoria, the larger portion of which went to San Francisco, from thence to be sent to all quarters of the globe, about two-thirds of the total catch going to Europe.

There are thirty-seven canneries in Astoria, employing about 4,000 men to man 2,000 boats, and as many more to dress and can the fish. Chinese are the cannerymen, and Italians, Greeks, and Scandinavians the fishermen. The average weight of the live salmon is 32 pounds each, although fish weighing as high as 80 pounds have been caught. The dressed fish weighs just about one-half less than it does when caught. The "handling" of the fish is an art. The "slitter" has a row of fish ranged on a table with the tails toward him. He walks along the table, and with a rapid movement cutting off tails and fins as he moves. Then the fish are reversed, and with equal celerity he chops off each head with a single motion. Then he slits the fish open and removes the entrails. The dressed fish are cut into slices by revolving knives, and by a compressing machine are packed into cans. A can of salmon is cooked in superheated steam long enough to cause the complete disappearance of the bones, otherwise the contents would spoil.

**A Cause of Typhoid Fever.**

The theory that the emanations from obstructed foul drains conveying decaying vegetable matter or human excreta is provocative of typhoid diseases, appears to accumulate testimony; and therefore that these drains should always be kept free and occasionally washed or "flushed" would seem to follow. The sanitary superintendent to the Board of Health of New York city has recently reported that an increase of typhoid cases might be expected, one of the reasons for the report being the restricted supply of the Croton water for cleansing purposes. The gist of the report on this subject is the requirement of an abundance of clean water for flushing all water closets, soil pipes, and drains. Dr. John C. Peters says that typhoid fever is caused largely by broken, overfilled, or otherwise defective drains, the latter of which are common in the country, and there typhoid fever is more common, in proportion to the number of inhabitants, in small towns and villages, and even isolated farm houses, than in large, well sewered cities with an abundant water supply. Typhoid fever is largely imported into New York and other cities every fall by visitors returning from so-called health resorts and summer boarding houses, but it generally dies out in the city. This year, however, partly because of the drought, we have not had sufficient water to flush our drains, soil pipes, and sewers.

Foreign capitalists have just bought a large tract of timber land in southeastern Arkansas, said to contain 460,000,000 feet of timber.

**JAVANESE BOATS AT THE INTERNATIONAL COLONIAL EXHIBITION AT AMSTERDAM.**

The industries of the Javanese are in a comparatively high state of perfection. Their arms, chased and inlaid swords, or "kris," their beautiful jewelry and fine works in silver filigree, carvings in ivory and ebony, fabrics, etc., are all made with very good taste, very strong and durable, and with the most primitive means. The Javanese are also very expert in building ships, although surpassed in this branch of industry by their neighbors, the Malays. In the exhibi-

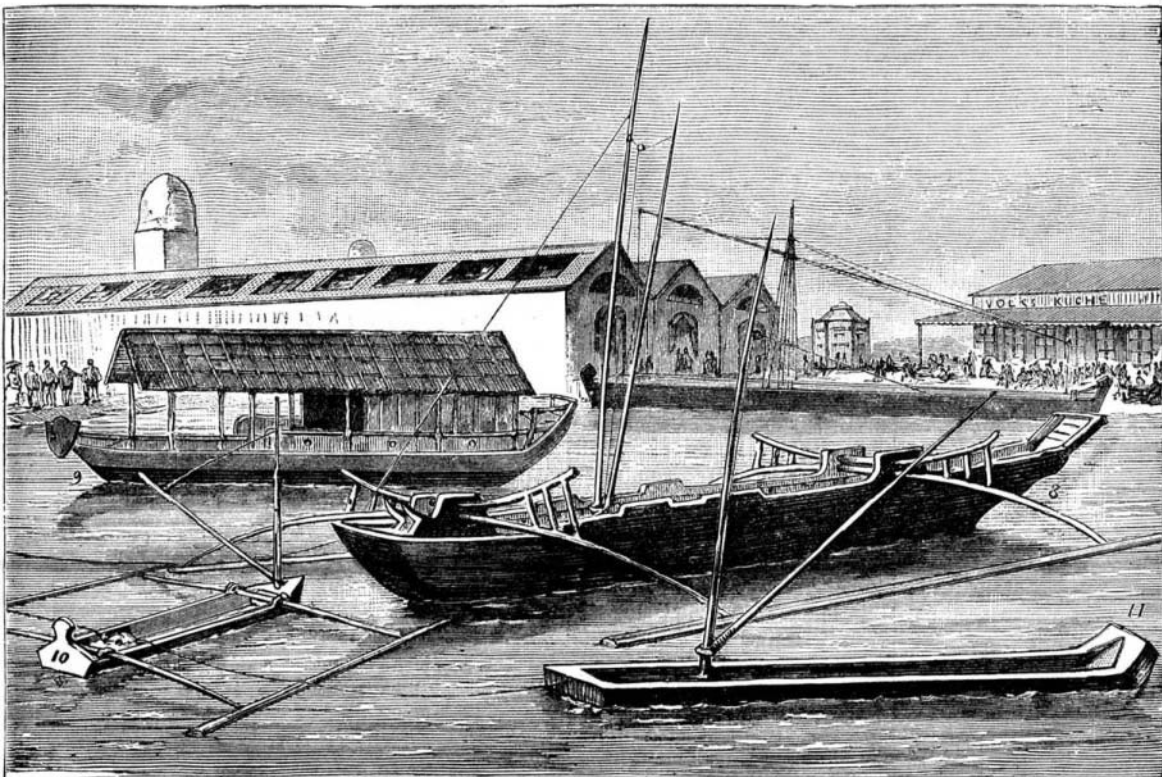


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tion there are hundreds of models of their ships, from the Sultan's ship of state to the Chinese proa, thousands of which annually cross the ocean between Canton and Batavia.

In the annexed cuts we have shown the principal forms and shapes of the vessels used along the coast. Not only the models are exhibited at Amsterdam, but also full size vessels, which are sailed on the canal flowing through the exhibition grounds.

The vessel marked 1 in the upper cut shows a proa from Makassar, on the island of Celebes. Vessels of this kind have room for two men only, but are used in traffic between the island of Celebes and Java, and remain out at sea for several days. This vessel, as well as those marked 4 and 5, is provided with means for preventing its capsizing. A transverse bamboo rod, or other piece of wood, extends over



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the vessel at each end and projects from its sides, and to the ends of the said transverse rods longitudinal rods are fastened in the manner shown. This frame prevents the capsizing of the vessel even in the greatest storms; but at the same time the boat offers greater resistance to the waves which dash over it with much force, and thus the danger of being washed overboard from these vessels is increased. Furthermore, it is very difficult to steer vessels provided with this contrivance, and they require much space in harbors. If this safety device were constructed with hinges, so that it

could be raised in the harbors, some of the difficulties would certainly be removed and the advantages still retained.

There is a good chance for an inventor to provide some ingenious contrivance by means of which these frames can be used on all small vessels in such a manner as not to be cumbersome and present too many difficulties. Every day we hear of drowning accidents caused by the capsizing of small vessels, and there is no reason why these safety frames cannot be used on the smaller vessels in our waters as well as on the Javanese vessels. In the vessels marked 6, 7, and 9 the safety frames are not provided, as these vessels are used for traffic on rivers.

No. 8 represents a Malay pirate vessel, in which a very ingenious device is provided for pressing the safety frames on the water, two rods being used at each end of the vessel instead of one, the rods crossing each other and struts being placed between the crossed ends of the rods, so that the upper end of one cross rod presses the outer end of the other upon the water.—*Illustrirte Zeitung*.

**Toy Torpedoes.—How Made.**

A reporter connected with the *N. Y. Sun* recently made a tour among the pyrotechnic manufacturers with the result of showing how the annoying torpedoes are made—those which children throw on the pavement with the result of startling staid men and women, and sometimes starting horses into unusual activity. The reporter that silver was made into a fulminate by means of nitric acid, and charged into quills—goose quills—and this mixture of silver and mercury, with pebbles to give the proper amount of friction or percussion, comprehended all there was of the toy torpedo, which is entirely innocuous and only startling. The reporter says: "On the top floor of the house he visited a number of other children were seen working as rapidly as those on the floor below. In the middle of the floor was a huge pile of small pebbles or grit. A stalwart and motherly looking forewoman had the children in charge. A batch of five or six little ones sat on low stools on the floor under the skylight. Each held in her lap a board about two feet long by one foot wide. In this board, as in those seen below, were a number of indentures about a quarter of an inch wide and of the same depth. Each child was also supplied with pieces of tissue paper about an inch and a half square. These sheets of tissue paper rested in their laps, while the board was on their knees. They would put a piece of tissue paper over one of the indentures in the board, and then with a rounded stick would push down the middle of the paper into the hole. This made a bag of the little square of tissue paper. When every hole in the board had been filled with these bits of tissue paper punched into the form of bags, the board was handed over to the next little girl, who had a long quill filled with the fulminate. Into each of the little paper bags she dropped some of the fulminate, and then passed the board over to another little girl. This one sat near the pile of pebbles, from which she filled up every one of the tissue paper bags. Then she handed the board to a fourth little girl, who had at her side a little pot of paste. This one constantly touched her finger to the

paste and then twisted the tops of the tissue paper bags together. When the little tissue paper bags were pulled out, they were perfect torpedoes of the regulation Fourth of July pattern.

GERMANY has 500 mills for the manufacture of wood pulp, and such a degree of perfection has been reached in its manufacture that even for the better qualities of paper it is a complete substitute for rags. Wood pulp constitutes 75 per cent of the paper stock used in that country.