

**MEMORIAL**  
OF THE  
**Port Tillamook Commission**  
OF THE  
**Rivers and Harbors Appropriation**  
**Committee**  
Of the House of Representatives of the  
United States.

At a meeting of the Port of Tillamook Commission held in the office of the bank of C. & E. Thayer, Monday, 17th instant, those present being, President A. J. Cohn, F. R. Beals, J. A. Taft, A. McNair, J. A. Todd and D. T. Edmunds, the following proceedings were had:

It was declared to be the sense of the commission that representatives should be sent to Portland to meet the Rivers and Harbors Appropriation Committee of the National House of Representatives and submit to that body the necessity for the improvement of Tillamook bay and bar.

Upon motion of F. R. Beals, Hon. B. L. Eddy and C. Thayer were chosen.

The following document, prepared by Mr. Thayer, at the request of the Executive Committee, to be presented in printed form to the National Committee was submitted, and after considerable discussion, in which all present took part, was unanimously adopted.

Tillamook Bay: The requirements of this bay must be taken up in two separate, distinct propositions.

The first project involves a continuance of the work heretofore undertaken and now in progress, that is the improvement of the channels inside the bay. In reference to this the following is the report of Wm. W. Harts, Captain Corps of Engineers published in 1900:

**IMPROVEMENT OF TILLAMOOK BAY AND BAR, OREGON.**

Location and history of improvement: Information in detail concerning the location, original condition, history of improvement, and other data is cited in the summary of this report.

Present project: The present project provides for obtaining and maintaining the least depth of 9 feet at mean high tide in a selected channel from a point in Bay City channel opposite Bay City, Oregon, up to Tillamook on Hoquarton Slough, so that small coasting steamers may reach Tillamook, the principal town of the vicinity, the proposed channel and depth to be obtained by constructing deflecting dikes of timber filled with rubblestone and brush. The depth across the bar at the entrance to the bay, and in the latter up to Bay City, being sufficient for these vessels, the project does not provide for any improvement below Bay City.

Operations under present project up to June 30, 1899: A number of deflecting dikes had been constructed at various places along the selected channel, to cause scour on shoals and to confine the incoming and outgoing tides. This work resulted in obtaining a channel having the least depth of about 8 feet at extreme high tide from Bay City up to Tillamook.

Operations during fiscal year ending June 30, 1900: In the last annual report, it was stated that proposals had been invited by circulars for the construction of a snag scow, and for furnishing the necessary equipment for it. This snag scow was built by the Tillamook Lumbering Company, of Tillamook, Oregon, during the past year. The work of constructing the scow was commenced by that company in August, 1899, but it was not completed and turned over to the United States until February 27, 1900. The scow is 70 feet long, 30 feet wide, and 4 feet deep. It is equipped with a hoisting engine, a 3/4-yard orange-peel dredge bucket, a pile driver and a derrick. The hoisting engine, dredge bucket, pile-driver hammer, and the greater portion of the derrick fixtures were furnished by the United States, the Tillamook Lumbering Company placing them in position on the scow. The cost of the scow was \$1,270, equipment \$1,450.90, total \$2,720.90. The cost of the hoisting engine is not included, this engine having been on hand at Cascade Locks, Oregon, for some years past.

On March 5, 1900, the snag scow was placed in commission with a crew of about ten men, and between that date and March 20, 1900, 256 obstructing snags were removed from the channel of Hoquarton Slough, between Tillamook and Bay City.

The existence of three shoals in the selected channel was mentioned in the last Annual Report, one at Dry Stocking Bar, one near the old mouth of Wilson River, and one opposite the southern end of the dike built in former years across the head of Middle Channel. The necessity for widening the channel dredged in former years, through the mud flat separating Bay City channel and Garibaldi channel, opposite Bay City, Ore., was also mentioned in the last Annual Report, as well as the necessity for making minor repairs to various dikes built in former years. During the past year dredging was done, new dikes were constructed or partially constructed, and others were repaired as stated below.

The work of dredging a channel 1,100 feet long, 60 feet wide and 10 feet deep at mean high tide through Dry Stocking Bar was commenced with the snag scow and crew March 26, 1900, and completed May 18, 1900. The average depth excavated at this bar was 2.4 feet, and 5,704 cubic yards of material was dredged from it. This material was composed of sand and gravel largely mixed with tree limbs and snags. Portions of this bar were found to be filled with brush and limbs forming compact rack heaps. Sixty-three large snags were encountered and removed in dredging this bar. A range on shore was set up in the center line of this dredged cut.

The work of dredging a channel 895 feet long, 60 feet wide and 10 feet deep at mean high tide through the shoals in the channel opposite the old mouth of Wilson River was commenced with the snag scow and crew May 19, 1900, and completed June 2, 1900. The average depth excavated at this shoal was 1 foot, and 1,988 cubic yards of material was dredged from it. A large amount of brush and snags was also encountered

in dredging this shoal. A range was set up on shore at Dicks Point along the center line of this dredged cut.

The work of widening by dredging the channel opposite Bay City, dredged in former years through the mud flat separating Bay City Channel and Garibaldi Channel, so that this channel will have a width of about 70 feet, was commenced with the snag scow and crew June 16, 1900, and is still in progress. This dredged channel, as originally excavated, was about 40 feet wide and about 9 feet deep at mean high tide. The length of the ditch to be widened 30 feet is 850 feet. Up to June 30, 1900, it has been widened 30 feet to the distance of 500 feet. The average depth excavated thus far in widening the ditch has been 5 feet, and 2,777 cubic yards of material have been dredged. The material dredged at this place has consisted of the kind of mud usually found on mud flats.

Five spur dikes, 154, 255, 186, 147, and 63 feet long, were constructed on the south side of Hoquarton Slough opposite the dike built in former years on the north side of Dry Stocking Bar. These dikes extend into the channel at right angles to the current, and are designed to narrow the channel and produce scour on Dry Stocking Bar, so as to maintain the channel dredged through that bar March 26—May 18, 1900. With the exception of the 25 feet of the channel end of the upper dike, each of these dikes consists of a row of piles (the piles in each row being 6 feet apart, center to center), waling strips on each side of the row, and sheet piling driven 4 feet into the mud bottom and spiked to the waling on the upstream side. The 25 feet of the channel end of the upper dike consist of two rows of piles, 6 feet apart, the piles in each row being 6 feet apart, a double waling strip bolted on each side of each row 8 inches below the top of the piles as sawed off. To the top of the piles which project above the waling strips cross pieces of timber were spiked, to prevent drift from lodging between the rows and to strengthen the work.

The work of filling the channel end of the upper dike with brush and rubblestone is now in progress.

Two spur dikes, 356 and 313 feet long, were partially constructed on the south side of the channel opposite the old mouth of Wilson River. These dikes extend into the channel at right angles to the current, and are designed to narrow the channel and produce scour, so as to maintain the channel dredged through the shoal at that place May 19—June 2, 1900. These dikes are about 1,200 feet apart, and each is to consist of two rows of piles, 6 feet apart, the piles in each row being also 6 feet apart. All the piling, waling spikes, and bolts for these two dikes are in place, and it is proposed to complete the dikes by filling the space between the two rows of piles of each dike with brush and rubblestone.

One spur dike 581 feet long was partially constructed on the east side of the channel opposite the southern end of the dike built in former years across the head of Middle Channel. This new spur dike extends into the selected channel at right angles to the current, and is designed to narrow the channel and produce scour on a shoal mentioned in the Annual Report of for 1899. This dike consists of two rows of piles, 6 feet apart, the piles in each row being also 6 feet apart. All the piling, waling, spikes and bolts for this dike are in place, and it is proposed to complete the dike by filling the space between the two rows of piles with brush and rubblestone.

During the past winter evidence of scour was noticed around the southern end of the dike built in former years across the head of Middle Channel. To check this action the southern end of this dike was extended along the edge of the mud flat for the distance of 300 feet by driving a row of piles 6 feet apart, and it is proposed to place brush mattresses weighted with rubblestone between the piles forming this extension.

The condition of the dike built in former years on the north side of Hoquarton Slough at Dry Stocking Bar at the beginning of operations this year is shown in photographs Nos. 6 and 7, following page 3218 of the last Annual Report. This dike, as originally built, consisted of two rows of piles 6 feet apart, a waling strip near the tops of the piles, cross braces from one row of piles to the other, the space between the two rows of piles being filled with brush mattresses and rubblestone. Some of the piles, waling, cross braces, and stone of this dike had been carried away by heavy drift during freshets, so that it permitted some of the flow to pass through it and down a channel north of Dry Stocking Island, instead of down the main channel of Hoquarton Slough south of this island, as designed. During the past year this dike was repaired by driving new piles between the piles driven in past years, bolting to same the necessary waling strips, and then placing sheet piling along 630.5 linear feet of the upper side of the dike, thus stopping the flow through the dike.

The dike across Wilson River, built in 1895, was repaired by replacing three piles which had been carried away. A small quantity of brush and rubblestone filling remains to be placed in this dike to place it in good condition.

All piles, lumber, bolts, spikes, and wire cable used during the past year in constructing new dikes and repairing others were furnished in place by O. J. Painter Nolan, of Tillamook, Ore., under an informal contract. Operations under this informal contract were commenced September 8, 1899, and completed May 7, 1900. The prices for the materials in place in the complete work were: Piles, 11 cents per linear foot; lumber \$16 per 1,000 feet board measure; spikes, bolts, and wire cable, 5 cents per pound. The quantities of materials placed in the dikes under this informal contract were as follows:

	Piles.	Lumber.	Spikes, bolts, and wire cable.
Spur dikes south side of Dry Stocking Bar:			
Upper dike.....	2,059	8,782	1,213
No. 2 dike.....	590	5,733	812
No. 3 dike.....	310	3,213	372
No. 4 dike.....	885	10,996	1,345
Lower dike.....	650	7,437	1,003
Spur dikes south side of shoal near old mouth of Wilson River:			
Upper dike.....	3,785	7,672	1,176
Lower dike.....	2,827	4,992	783
Spur dike east side of shoal opposite southern end Middle Channel dike.....	4,353	14,232	1,927
Extending southern end of			

Middle Channel dike.....	1,334		
Repairing dike north side Dry Stocking Bar.....	4,728	33,043	3,906
Repairing Wilson River dike.....	66		
Total.....	21,568	96,100	12,546

All the brush mattresses and rubblestone filling placed in the dikes during the past year, and that remaining to be placed is provided for by an informal contract with G. W. Kiger, of Tillamook, Ore., made consequent to a circular advertisement dated March 10, 1900, inviting bids, the prices for the materials in place being, brush fascines, \$3 per cord; galvanized iron wire, 6 1/2 cents per pound; lumber, \$16 per 1,000 feet board measure; spikes, 5 cents per pound; stone, \$1 per ton. The placing of materials under this informal contract has just been commenced.

The dredging, construction of new dikes, and repairs made to other dikes, during the past year has resulted in obtaining a channel so that vessels drawing 9 feet of water may at mean high tide reach Tillamook, which is the depth called for by the existing project. Considerable more work will be required, however, to make the dikes already constructed permanent.

The location of the selected channel from the lower bay up to Dicks Point is marked by seven beacons of four piles each, and shore ranges indicate the channel dredged through Dry Stocking Bar and the channel dredge through the shoal near the old mouth of Wilson River.

The purchase of a scow needed as a tender for the combined dredge, pile driver, and derrick scow was authorized by the Chief of Engineers February 9, 1900. This scow was built at Portland Ore., under an informal contract with J. F. Steffen, for \$750. It is 60 feet long, 24 feet wide, and 4 feet deep. It was towed from Portland to Tillamook Bay by U. S. steamer General H. G. Wright in June, 1900.

Authority to purchase about 1 acre of land on Hoquarton Slough, near the town of Tillamook, was given by the Secretary of War April 10, 1900. This land and its waterfront are needed as a place to store and moor the Government plant when not in use. The papers pertaining to the title to the land are in course of preparation.

It is estimated that the various dikes constructed in past years and those now in course of construction, with the improved channels may be made practically permanent with the \$27,000 given in the appended money statement as the amount that can be profitably expended for maintenance of improvement in fiscal year ending June 30, 1902, in addition to the balance available July 1, 1900, this work of maintenance to consist of maintaining and operating the snag and dredge boat whenever required during this time, and of so filling and banking up the sides of the dikes with rubblestone that the dikes will continue to maintain the selected channel after the piles and timber portions of them have become decayed.

Mr. Frank Batter, inspector, has been in local charge of the work in progress during the past fiscal year.

**MONEY STATEMENT.**

July 1, 1899, balance unexpended.....	\$4,838.86
June 30, 1900, amount expended during fiscal year.....	12,162.42
July 1, 1900, balance unexpended.....	12,676.44
July 1, 1900, outstanding liabilities.....	1,742.52
July 1, 1900, balance available.....	10,933.92

Amount (estimated) required for completion of existing project..... 27,000.00  
Amount that can be profitably expended in fiscal year ending June 30, 1902, in addition to the balance available July 1, 1900, for maintenance of improvement..... 27,000.00  
Submitted in compliance with requirements of sections 2 of river and harbor acts of 1867, of section 7 of the river and harbor act of 1897, and of sundry civil act of June 4, 1897.

**APPROPRIATIONS.**

Act of—	
August 11, 1888.....	\$5,200
September 19, 1890.....	500
July 13, 1892.....	15,000
August 18, 1894.....	17,000
June 3, 1896.....	25,000
March 3, 1899.....	25,000
Total.....	78,700

**COMMERCIAL STATISTICS.**  
Tillamook Bay is in the collection district of Oregon. Astoria near the mouth of the Columbia River, is the nearest port of entry. The nearest light-house is at Cape Meares, about 4 miles south of the entrance to Tillamook Bay.

The following statistics are for the calendar year 1899: The number of coasting vessels that called at Tillamook Bay during the year was 78. Of this number 27 steamers and 15 sail vessels proceeded only as far as Garibaldi or Hobsonville, which are just inside the entrance to the bay; the remainder, 36 steamers, proceeded of Tillamook City, the head of navigation.

**RECEIPTS AND SHIPMENTS.**

Articles.	Receipts.
General merchandise.....	4,963
Machinery and implement.....	60
Total.....	5,023

Articles.	Shipments.
Lumber (12,389,044 feet).....	18,584
Canned salmon (in cases).....	354
Butter and cheese.....	624
Cattle.....	2.5
Total.....	21,812

Number of passengers arriving and departing by sea during the year, 480.

Steam schooners W. H. Harrison, tonnage 75, and R. P. Elmore, tonnage 62, made weekly trips between Astoria, Ore., and Tillamook City, Ore., during the summer months, and irregular trips during the winter months. Steam launch Louise, tonnage 8, plied between the different points on Tillamook Bay, carrying freight and passengers. Various steam and coasting vessels made irregular trips between Garibaldi or Hobsonville, Ore., and San Francisco, Cal., carrying lumber to the latter place for market.

The recommendations contained therein meet with the approval of the Port of Tillamook Commission as representing the citizens.

The Port also demands that the appropriation be increased to provide for the purchase and maintenance of what is known as the Bowers dredge. The scope of the contemplated improvement should also be extended from its Bay City terminus to below Garibaldi.

The Port feels also justified in demanding a depth of ten feet in the channel from inside the bar past Bay City and up to the docks at Tillamook City. A Bowers dredge is asked for as a matter of economical handling of the detritus. The result of relying entirely upon the force of the channel waters has not been at all satisfactory at Dry-Stocking, nor as a matter of fact at any other point on the bay. The present dredger has accomplished more than all the dikes that has ever been put in. It is to be noted that the dredging of a comparatively small number of places will give the required depth of ten feet. The maintenance of the same is, of course, a matter some what of conjecture although it must be expected that more or less work will be necessary every

year on account of the heavy discharge of detritus during the annual floods.

Improvement of the bar: The Port of Tillamook demands as a matter of right, justified by the resources of the county, by the amount of money which has been derived by the General Government from the sale of lands within the boundaries of the county, and on account of the great consequent increase of the value of natural resources of the Nation, the establishment and maintenance of a channel on Tillamook bar carrying thirty feet of water.

As to the commerce of the county and the traffic upon Tillamook bay: The following statistics are taken from the official estimates made under direction of Captain W. W. Harts and Captain W. C. Langfit and kindly furnished to us under instructions from the latter:

**Commercial Statistical Report.**  
United States Engineer Office, Tillamook, Oregon, January 1, 1901.

CAPT. WM. W. HARTS,  
Corps of Engineers, U. S. Army,  
Portland, Oregon.

CAPTAIN: I have the honor to transmit herewith a commercial statistical report for the port of Tillamook for the year ending December 31, 1900, which includes some data pertaining to the resources tributary to Tillamook Bay, Oregon, which might be of some interest to you.

**VESSELS.**

Number of vessels arrived and cleared from Tillamook Bay during the year ending December 31, 1900.....61

Passengers arrived during year by sea.....688

Passengers departed during year by sea.....510

Remarks: The steam schooner W. H. Harrison, tonnage registered 75, and steam schooner, Sue H. Elmore, registered tonnage about 150, attempted to make weekly trips between Astoria and Tillamook City, Oregon, during the summer months, and irregular trips during the winter months.

The steam launch Louise, tonnage 8, and the steam launch Annarine, tonnage 15, ply between the different points on Tillamook bay, carrying freight and passengers.

**IMPORTS.**

General Merchandise: 3,415 tons, average value \$125 per ton, total value.....\$426,875

Remarks: Will state that the average value of \$125 per ton for general merchandise brought into Tillamook bay, as submitted to you in this report, was the result of inquiries made of different merchants as to the average cost per ton of general merchandise received by them. After averaging the value of twelve different shipments which included salt, feed, flour, hardware, boots and shoes, ready made clothing, groceries, dry-goods, etc, in fact everything imported which is needed to supply the wants of some 5000 prosperous inhabitants, including transients.

**EXPORTS.**

Lumber: 7,390,000 feet B. M., valued at \$12 per M., total value.....\$88,680

Remarks: Mr. C. B. Hadley, superintendent of the Tillamook Logging Co., informs me that his company has over 12,000,000 feet of saw-logs in the waters of Tillamook bay and some of its tributaries, and that the mill wharves are covered with lumber awaiting shipment. These conditions are due to their inability to secure vessels to carry lumber from Tillamook bay.

Dairy Products, Canned and Salt Salmon, Chittim Bark and Hides: 3640 tons, with an approximate value of 10 cents per pound, or total value of.....\$728,000

Remarks: The exact amount of dairy products exported as mentioned above is not known being the output of some eleven butter and cheese factories and many private creameries and dairies.

Cattle: Cattle of all kinds, the number is estimated to have been about 6,000 head, sold at an average price of \$20 per head, or a total value of.....\$120,000

Horses: Parties considered responsible inform me that some sixty head of good horses were shipped out of Tillamook during the year, which were sold at an average price of \$100 per head, or a total value of.....\$6,000

Swine: Fifty head valued at.....\$500

Sheep: About 350 head, valued at.....\$1050

Remarks: It is difficult to find out the exact number of cattle, horses, sheep, swine, etc., shipped out of Tillamook during the past year. The number and value can only be considered approximate, and in collecting data it has been my intention that the estimates given in this report can be regarded as conservative.

**RESOURCES.**

Timber: It is generally understood or known that there are about twenty-one townships of good timber land tributary to Tillamook Bay. The estimate made of above timber lands is 5,000,000 feet to each quarter section, or a total number of feet, board measure, of timber, of.....15,120,000,000

Remarks: The above estimate has been made from the report or estimate of a number of persons who are considered competent cruisers of timber lands.

Its value cannot be given here for the reason that the price paid for stumpage varies from 50 cents to two dollars per thousand feet B. M., depending largely upon the location of the timber and the facility of shipping the same. As evidence in support of the above estimates I note that the records of Tillamook County show that up to March 1st, 1900, about 170,000 acres of timber land has been taken up under cash entries, the purchasers paying the U. S. Government \$2.50 per acre outside the railroad limits.

Coal: It is reported that measures of Lignite or Brown Coal have been located between the waters of the Nehalem and Tillamook Bay, but their extent and marketable quality is not sufficiently known to appear by figures in this report.

From the first of January, 1901 the number of vessels passing in and out over the Tillamook bar was, up to the first of June.....112

Total tonnage.....10,799

Passengers carried.....418

Lumber exported 4,868,851 ft. worth.....\$50,000.00

The all important shipments from Tillamook will always be lumber and dairy products. The value of the latter which is entirely in this case controlled by the condition of the bar during the winter months. The direct loss to the dairy industry of this county during the last four years occasioned by shifting and rough bars and consequent disappointment in shipping cannot be placed at less than \$25,000. This loss will be a proportionately greater one for every year that the bar is left unimproved.

Lumber Shipments: In the present condition of the Tillamook bar San Francisco is the only available shipping point. Grays Harbor in the state of Washington is perhaps 100 miles further from San Francisco than is Tillamook Bay; it is likewise a lumber shipping port. The difference in