BIENNIAL REPORT

OF THE

BOARD OF STATE HARBOR COMMISSIONERS

FOR THE

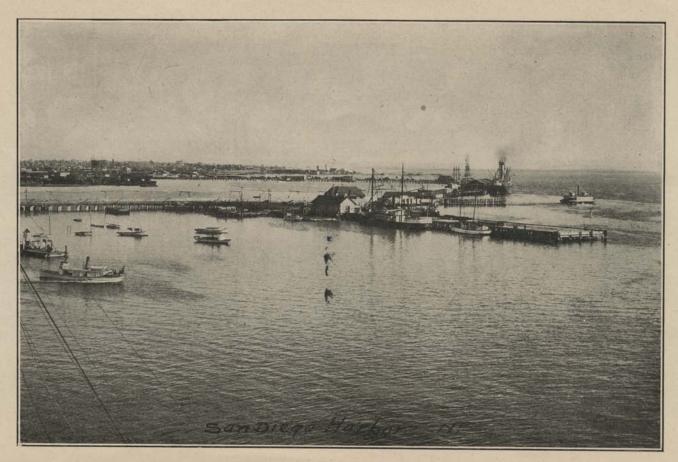
BAY OF SAN DIEGO

OCTOBER 1, 1910



SACRAMENTO:

W. W. SHANNON, : : : SUPERINTENDENT STATE PRINTING



SAN DIEGO BAY.

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384 CIVIC CENTER

SIN DIEGO 1, CALIFORNIA

OCTOBER 1, 1910



SACRAMENTO:

124

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BOARD OF STATE HARBOR COMMISSIONERS FOR THE BAY OF SAN DIEGO.

CHAS. W. OESTING	San Diego.
F. W. JACKSON	San Diego.
L. A. CREELMAN	San Diego.
OFFICERS	
OFFICERS.	
CHAS. W. OESTING	\dots . President.
L. A. CREELMAN	Secretary.
T. M. SHAW	Harbor Master.
EUGENE DANEY	Attorney.

LETTER OF TRANSMITTAL.

SAN DIEGO, CAL., October 1, 1910.

To Hon. James N. GILLETT,

Governor of the State of California.

Your Excellency: In accordance with the provisions of section 2592 of the Political Code, the Board of State Harbor Commissioners for the Bay of San Diego respectfully submits the following report for the two years beginning October 1, 1908, and ending September 30, 1910.

REPORT

OF THE

BOARD OF STATE HARBOR COMMISSIONERS FOR THE BAY OF SAN DIEGO.

CHANGES AND REORGANIZATION OF THE BOARD.

There has been a number of changes made in the personnel of the Board during the last two years, caused both by new appointments being made by the Governor to fill expired terms of commissioners, and a vacancy filled by the Board, caused by the death of the Harbor Master, Capt. W. H. Pringle.

April 16, 1909, L. A. Creelman appointed *vice* Capt. W. H. Pringle, term expired. April 16, 1909, F. W. Jackson appointed *vice* Eugene DeBurn, term expired. At a meeting of the Board held April 27, 1909, the Board was reorganized as follows:

CHAS. W. OESTING	President.
	Secretary
F. W. JACKSON	Commissioner.
CAPT. W. H. PRINGLE	Harbor Master
EUGENE DANEY	Attorney

On March 21, 1910, occurred the death of Capt. W. H. Pringle after a very short illness. Captain Pringle had been a member of the Board for many years, both as Harbor Commissioner and Harbor Master, which last appointment he held at the time of his death. At the regular meeting held on April 5, 1910, suitable resolutions of respect were drafted, adopted, and ordered placed on the records of the Board. At this same meeting T. M. Shaw, of San Diego, was appointed as Harbor Master vice Capt. W. H. Pringle, deceased, leaving the personnel of the Board October 1, 1910, as given elsewhere in this report.

FINANCIAL STATEMENT.

Senate Bill No. 774, amending section 2584 of the Political Code, approved by the Governor March 20, 1905, went into effect April 1, 1905. The provisions of this law authorized the Board of State Harbor Commissioners for the Bay of San Diego to designate a bank in which shall be deposited all moneys received for the use of the bay and its tide lands, and to draw from the bank and pay the salaries of the members of the Board and all necessary expenses of the Board.

Balance

On the 20th day of June, 1905, the American National Bank of San Diego was designated by the Board as the bank of deposit.

On March 1, 1910, the following resolution was unanimously adopted:

That the First National Bank of San Diego be designated as the depository of all funds in the control of this Board, and that the Secretary make the proper transfer.

runds in the control of this 2	A	DISBURSEMEN	TS
RECEIPTS.	W44= 4=	1908—October	E012E0112222
1908—October 1, balance	_ \$415 15	November	F00 05
October		December	
November			
December	518 70	1909—January	OMO 40
1909—January	_ 442 00	February	
February	_ 495 50		200 00
March	_ 398 75	April	
April	_ 447 00	May	
May	_ 628 00	June	
June	_ 519 00	July	
July	_ 473 50	August	
August	_ 479 50	September	470 00
September	_ 482 00	October	0.00
October	_ 548 00	November	222 42
November	_ 480 00	December	
December	_ 465 00	1910—January	
1910-January	_ 621 50	February	
February	_ 552 75	March	
March	_ 538 50	April	
April	_ 518 00		
May	_ 444 00		
June	_ 686 90		378 00
July	_ 514 25		
August	_ 596 50		384 50
September	_ 504 50		20 011 00
		Total	\$9,941 00
	210 700 50	Balance	\$2,851 50
Total	_\$12,792 50	Balance	
RECAPITULATI	ON OF RECI	CIPTS AND DISBURSEMENTS	
Total receipts			\$12,792 50
Total receipts			
Disbursements-			00
C. W. Oesting, salary		30	15 00
C + W II Daingle color	Mr.		
The Danner colorer		The second secon	
T A Croolman salary			
Engl W Ingkenn salary			
m M Show salary			50 00
Your mana	The second secon	AND REAL PROPERTY AND ADDRESS OF THE PARTY AND	28 00
Office wort			00 00
Stationery, postage, incide	ntals		281 00
Stationery, postage, metal			9 9 9 4 1 00

DISPUTED TITLES, ETC., BAY OF SAN DIEGO.

\$2,851 50

In 1907 the State Legislature appropriated \$10,000, to be used in establishing the rights of the State to the tide lands of the bay of San Diego, the title to which was disputed. The Board has caused surveys and maps to be made of a portion of the bay shore preparatory to regaining the tide lands claimed adversely to the State.

1908. Oct. 1—Balance	\$9,226 75
Oct. 6-G. A. DeHemecourt, voucher No. 10	\$10 00
Nov. 4-G. A. DeHemecourt, voucher No. 11	10 00
Dec. 1—G. A. DeHemecourt, voucher No. 12 1909.	736 90
Jan. 7-G. A. DeHemecourt, voucher No. 13	862 80
Feb. 2—G. A. DeHemecourt, voucher No. 14	
Mar. 2—G. A. DeHemecourt, voucher No. 15	323 00
Apr. 6—G. A. DeHemecourt, voucher No. 16	656 15
July 7—H B. Stewart, voucher No. 17	60 70
July 7—G. A. DeHemecourt, voucher No. 18	201 80
July 9—San Diego Boat House, voucher No. 19	
July 9-V. Bruschi & Co., voucher No. 20	
July 9—Fanning's Stables, voucher No. 21	36 00
July 9—Pierce-Field Hardware Co., voucher No. 22	
July 9—Pioneer Transfer Co., voucher No. 23	The state of the s
July 9—Southern Electrical Co., voucher No. 24	
July 28—Point Loma Ferry Co., voucher No. 25	
July 28—Point Loma Ferry Co., voucher No. 20-1-1-1	
July 28-J. Courtney, voucher No. 26	3,389 06

SHIPPING AND COMMERCE.

Statistics showing the increase of commerce in the bay of San Diego during the time 1908-1910:

Year.	Vessels arrived.	Net tonnage.	Import values.	Export values.
1908	537 609	438,084 427,001	\$486,838 00 747,575 00	\$386,324 00 663,114 00
LUMBER	IMPORTED.			
		Vessels	Log rafts.	Feet, B. M.
1909			37	68,000,000 97,000,000
PACIFIC COAST STE	AMSHIP C	OMPANY.		
			Incoming.	Outgoing.
1909—to October 1			20,017 tons 23,193 tons	7,347 tons 7,155 tons

STANDARD OIL COMPANY.

September 1, 1909, to September 1, 1910.	
	600,000 gallons
Water white oil	700,000 gallons
Engine distillate	400,000 gallons
Final oil	60,000 barrels

The Union Oil Company receives from their steamers to their tanks oil approximating 20,000 barrels per month.

The principal articles of import are coal, coke, lumber, cement, ores.

gold and concentrates, live stock, guana, structural iron, iron pipe, merchandise, machinery, onyx, oil, hides, and tea. These are received from the United Kingdom and the British Possessions, Germany, Mexico, China, and Japan.

The principal articles of export are grain, live stock, lumber, lime, cement, coal, malt liquors, honey and beeswax, agricultural machinery, fruits and nuts, fish, and provisions. These are sent to the United Kingdom and British Possessions, Germany, and Mexico.

Within the last two years two new lines of steamers have been calling at this port. The American-Hawaiian Steamship Co., Tehuantepee route, and the North Pacific Steamship Co.

The American-Hawaiian steamers are huge freighters, averaging 450 feet in length and having a net tonnage of from 3,650 to 5,636, and drawing 28 feet of water. They leave Salinas Cruz every six days, calling at San Diego, San Francisco, Portland, and Seattle on the Pacific coast, thence to Honolulu. Arrangements are soon to be made whereby they may also be allowed to carry passengers.

The North Pacific Company's steamers run from San Diego to Portland, Oregon. They make the trip every seven days, carrying both passengers and freight. The success that this company has attained in the short time they have been in operation fully justifies the belief that their venture will be a successful one.

The cotton industry in southern California, notably Imperial Valley, together with the fact that San Diego is 500 miles nearer the cotton belt than any other Pacific port, assures us of a large traffic with the Orient. This means that vessels carrying cotton to the Orient must be returned with product to be distributed in the East. What New Orleans and Galveston are to the commerce of the Gulf States, so may San Diego be to the southwestern ports of this great country.

The fishing industry is rapidly coming to the front. The California and Mexican Fisheries Company have leased a large tract of land on the water front, and are constructing buildings and wharves for the packing and canning of all kinds of fish. There are great possibilities in the canning of sardines, lotsters, etc., as the bay is alive with edible fish, and on the banks a few miles from the harbor's mouth an endless variety of all kinds of fish may be found.

The oil industry has taken great strides during the last two years. According to the statistics secured from the companies on this harbor, the oil-burning machinery, having to a great amount taken the place of coal, accounts for their increased business.

On the calm waters of the bay of San Diego also may be seen the numerous rowing clubs out for their daily practice. This is, without doubt, the only harbor on the Pacific coast where boating and swimming may be indulged in every day of the year, winter and summer.



AMERICAN-HAWAIIAN LINER "MEXICAN."

TIDE LANDS-BAY OF SAN DIEGO.

Inventory and appraisement of the tide lands in the bay of San Diego, belonging to the State of California, in charge of the Board of State Harbor Commissioners for the Bay of San Diego, California.

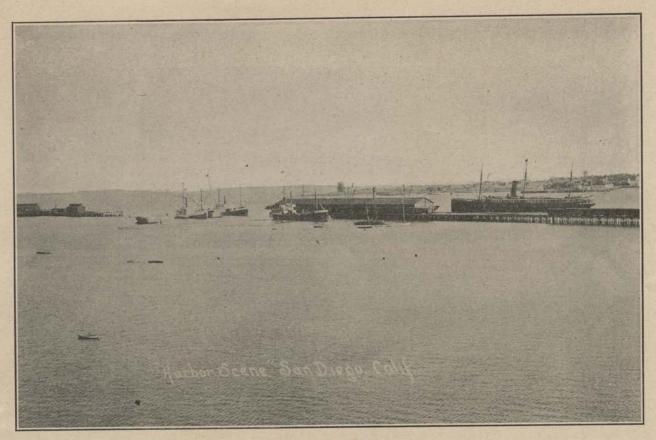
These tide lands lie between the line of mean high tide and the bulk-head or seawall line. They are from 200 to 600 feet in width, and extend entirely around the bay.

On the north shore of the bay, from the entrance to the Coaling Station, a distance of about three miles, the tide lands belong to the United States Government.

On the south shore of the bay, from the jetty to near Spanish Bight, a distance of about five miles, the tide lands belong to the Coronado Beach Company.

The remainder of the tide lands belong to the State of California.

	Acres.	Valuation per acre.	Total value.
Tract No. 1— From the line of the Military Reservation on Point Loma to Hawthorne street, in the city of San Diego	435.24	\$600 00	\$261,144 00
From Hawthorne street in the city of San Diego, to A street in the city of San Diego.	16,50	3,000 00	49,500 00
Tract No. 3— From A street in the city of San Diego, to the Hartupee Tract in the city of San Diego.————————————————————————————————————	53.60	10,000 00	536,000 00
Tract No. 4— From Hartupee Tract, in city of San Diego, to line of National City	57.20	3,000 00	171,600 00
Tract No. 5— From boundary line of National City to Thirty-first street in National City.	102.02	2,000 00	204,040 00
Tract No. 6— (Assumed to be 300 feet wide) from Thirty-first street in National City to the south boundary line of National Rancho	104.00	500 00	52,000 00
Tract No. 7— (Assumed to be 600 feet wide) from the south boundary of National Raneho to Second street, Coronado Heights	171.00	200 00	34,200 00
Tract No. 8— (Assumed to be 300 feet wide) from Second street, Coronado Heights, to Glorietta Bay	218.00	300 00	65,400 00
Tract No. 9— (Assumed to be 200 feet wide) from Glorietta Bay to Spanish Bight	72.00	800 00	57,600 00
Totals	1,229.56		\$1,431,484 00
Tide lands which were filled by private individuals, but which are claimed by the Commissioners for the State of California, viz.:			
Tract No. 10— Hartupee Tract	21,3	\$4,000 00	\$85,200 00
Tract No. 11— Lands lying between F street and the Hartupee Tract	14.60	12,000 00	175,200 00
Total for Tracts 10 and 11. Total for first nine tracts.	100100		\$280,400 00 1,431,484 00
Grand totals	1,265.46		\$1,691,884 00



HARBOR SCENE.

LOG RAFTS.

One of the newer industries of the bay of San Diego is that of the Benson Lumber Company, who conceived the idea and perfected the plans for the achievement of bringing huge rafts of logs intact from their lumber camps of Clatskanie, Oregon. These rafts are put together with immense binding chains and are towed from the Columbia River country to their own mill on the water front, where they are taken apart and sawn into lumber with modern machinery, operated by most skilled workmen.

The first raft arrived in San Diego in July of 1906 and aroused much interest, thousands visiting it in excursion boats before it was cut up. In the center of this raft was the lumber for the very complete mill which was at once erected and the logs were being sawn and sold as fast as they could be turned into lumber. Thus was solved the question of cheaper transportation of raw material.

Five more rafts soon followed, representing footage of about 25,000,000 feet, and each year since this firm has been rafting these ocean monsters, meeting not once with mishap and bringing all through in perfect condition. These rafts have averaged 700 feet in length, 65 feet in width and 36 feet through from top to bottom, drawing 29 feet of water in crossing the bar, and containing from 5,000,000 to 6,000,000 feet of lumber. It is worthy of mention that outside of San Francisco this is the only port on the Pacific coast where rafts of large dimensions can be safely towed into the harbor.

Conservative estimates show that there has been 100 per cent more building throughout the southern part of this State since the first log raft came to San Diego. The growth of the Benson Lumber Company, within the four years of its existence in this locality, demonstrates the appreciation on the part of the citizens of San Diego of this enterprise, and should make this port, with its excellent harbor, the lumber distributing point of the great southwest.

EARLY HISTORY OF THE BAY OF SAN DIEGO.

The bay of San Diego was first discovered by one Juan Rodrigues Cabrillo, who was sent out by the Spanish conquerors of Mexico, who were desirous of exploring the region to the northwest of that country, and who thought they might discover India. The expedition consisted of two ships leaving Natividad, on the west coast of Mexico, in June, 1542. After a perilous voyage lasting three months, they cast anchor in the smooth and placid waters of what is now the bay of San Diego.

Sixty years after, in 1602, the King of Spain, Philip III, sent Viscaino with a small fleet to explore the California coast with a view of opening the way to settlement. Viscaino sailed from Acapulco, Mexico, in May,



1602, and, after stopping at several places along the coast, finally entered the bay in November, 1602. He surveyed and made a map of the harbor, also exploring the land adjacent to the shores. Cabrillo had named the bay San Miguel, but Viscaino gave it the name it now bears at the present time, the Bay of San Diego.

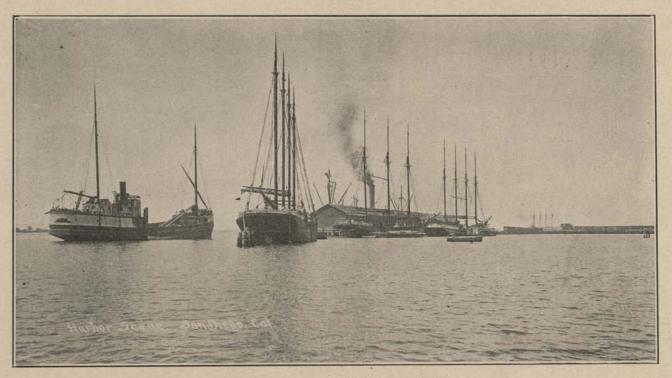
The actual occupation of these western shores and the utilization of the harbor did not begin until the time of Father Junipero Serra, sent by the Spaniards to plant the Christian religion among the Indians and to establish a post and settlement at this harbor. At this time, in 1769, expeditions sent out from Mexico by land and sea arrived, houses were erected, and the settlement at San Diego Bay permanently founded.

THE HARBOR.

On the whole western coast of the Pacific, with about 2,000 miles of shore line, there are only six important ports. The first American port of entry on the Pacific coast has acquired a new significance, being the first American port touched by vessels passing through the Panama Canal from the Atlantic Ocean to the Pacific Ocean, and the last American port of call for vessels from the Pacific Ocean to the Atlantic Ocean. Seafaring men declare it to be without an equal in the world. The Pilot Chart, published by the Bureau of Navigation at Washington, indicates in a striking manner the very important position occupied by the port of San Diego and its proximity to the great circle routes from China and Japan.

In the great State of California, with a coast of 800 miles in length, there are but two large deep harbors, of which the bay of San Diego lies in the far south, completely landlocked and perfectly secure from the effects of any storm that may sweep the ocean. Nature has done much for the bay of San Diego, and the physical situation is such that Point Loma, that great physical projection, affords complete protection against the southwest swells and makes an entrance to the bay possible under any condition of weather; and there is no place on the Pacific coast better adapted for the care of a large commerce, and the bay of San Diego will eventually make one of the greatest commercial ports of the world. It will be the only way-port for the Atlantic coast shipping to and from Hawaii and the Orient, and all vessels passing through the canal either way will put into this port to recoal, take on supplies or to overhaul and make repairs. This will necessitate the construction of drydocks and shipyards.

The value of San Diego harbor as a base for naval operations is already observed by the Government. Impregnable forts have been built and other extension works are in the course of construction for defense and improvement The strategic importance of San Diego Bay



SHIPPING SCENE, SAN DIEGO HARBOR.

is recognized by the Government of the United States. Fort Rosecrans, at the mouth of the harbor, is located at the water's edge. Besides some smaller rapid firing guns, there are immense disappearing guns, which alone could defend the entrance against the enemy's fleet. Other batteries will soon be constructed.

AREA AND DEPTH.

In the form of a crescent, about 13 miles in length and varying from one half mile to two miles in width, the bay has an area of about 22 square miles, and within the harbor can be anchored the entire navy of the world. So deep is the entrance that white water is never seen and there is very little perceptible swell. The general opinion that the depth of 28 feet over the bar, as measured some years ago, is still the correct one, is very much in error. The bar at lowest tide now marks 30 feet, while at high tide it reaches about 35, and ships can cross with safety at any time during the day or night.

There are no hidden reefs, sunken rocks, or treacherous currents to guard against. The entrance is straight and easy of access. So smooth and placid are the waters of the bay that ships lying alongside wharves need no fenders to prevent chafing. So calm is the atmosphere that on only one or two occasions during the year do winds reach so great a velocity as 25 miles an hour. No vessel has ever dragged her anchor, and no marine disaster has ever occurred on account of storm in San Diego harbor.

CHANNEL.

The average depth of the channel of San Diego Bay is 36 feet; the average depth of channel of 122 of the principal ports of the world is 30.6 feet. The present depth of the bay varies from 80 feet opposite the wharves of San Diego, to 30 feet ten miles up the bay. Anchorage is safe in any part of the channel, owing to the holding ground of deep, heavy, tough mud, and depth of water sufficient to float the largest vessels that traverse the seas.

DREDGING-JETTY.

In the early days the San Diego River poured its waters into the bay, and there was prospective danger that such a great amount of sand and detritus would be deposited that its value as a harbor would be destroyed. In 1876 a permanent bulkhead and riprap dam was constructed, which effectually shut the river out, and up to the present time has still held it in check.

It is a well known fact that the accentuated velocity of the ebb tide in bays fed by fresh water streams is caused wholly by the delivery on the ebb tide of more water than entered on the flood tide. San Diego Bay, being comparatively free from this feature by reason of the absence of flowing streams, derives no benefit in the form of added waters, except from occasional rainstorms, and they only add to the amount of soluble matter in the bay.

The Government has constructed a jetty at the mouth of the harbor, which causes the outgoing tide to strike the bar directly without diffusion, the effect being the scouring of the bottom. As a result of the large exposed shore without any protection against erosion, the amount of matter released by the flood tide on entering the bay and carried out in suspension contributes to a very marked degree to the formation of the bar. At the present time, having no fresh water supply, this can be reduced to a tidal basin by the correction of the shore line, through the elimination of matter which now necessarily finds its way into the bay and is consequently deposited at the bar.

Officers of the Corps of Engineers of the United States Army report that a depth of 30 feet across the bar may be maintained by extending the jetty a distance of 3,500 feet and by constructing another jetty on the opposite side of the channel, extending outward from the extremity of Point Loma a distance of 3,000 feet. They, however, conclude that the same object may be attained by dredging; and they recommend that a channel 600 feet wide across the bar be deepened to 30 feet, and that a channel 30 feet deep be dredged across the middle ground, with a minimum width of 400 feet, flaring to a greater width at the upper end to facilitate access to the Coaling Station.

WHARVES.

Before any wharves had been built about the bay of San Diego, vessels used a crudely formed natural pier near the mouth of the harbor for the purpose of loading and discharging cargoes. This pier consisted of a large amount of water-worn cobblestone rock extending into the water some 800 feet, and called Ballast Point. On the near side the water was 60 feet deep close in shore, so that vessels might lie to, and spar off shore to receive and discharge goods. At that time there was but little commerce, the articles of export being mostly hides and tallow, and the imports such goods as were used for domestic purposes and clothing. As commerce increased, it became necessary for wharves to be built.

At present there are nine large wharves in San Diego Bay, besides more than a dozen wharves for small boats. Fully \$2,500,000 has been spent on these wharves and improvements, almost all of which run into deep water and are easy of approach, with from 25 to 40 feet at low tide. Some of these wharves extend into the channel from 2,000 to 3,000 feet, and the longest can readily accommodate from eight to ten of the largest vessels afloat.

The wharves in the bay are all the private property of individuals or corporations, and the franchises of all but one of them will expire by the year 1925. It has been the policy of the Board to so grant all wharf franchises and all renewals of franchises to extend to that date, so that all wharves in the future conform to a general plan in direction of extension and in plan of construction.

With a few minor changes the wharfage would be ample for a large commerce, and everything is in readiness to welcome the large ocean traffic that has already commenced to seek this port. The commerce of the port of San Diego is greatly increasing, owing to the rapid development of the southern part of the State. When the Panama Canal is opened, we anticipate that a very great amount of the products of this section of California will be shipped to the Atlantic coast through this port and the canal; also that great quantities of merchandise from the cities of the Atlantic coast and Europe which are destined for southern California and the territory eastward will be shipped through the Panama Canal, and will be entered at this port, as well as the quantities of the products of the Orient shipped to the United States.

Construction is now rapidly going on for a direct line of railroad to the east: the San Diego and Arizona Railway, which will save 500 miles at least over any existing route. The Board of State Harbor Commissioners have granted a franchise to the San Diego and Arizona Railway for the building of large concrete piers to be used in connection with this project. These piers when completed will cost in the neighborhood of \$1,000,000, and will accommodate the deepest draft vessels afloat.

On the Coronado side of the bay there are marine ways capable of accommodating vessels of large tonnage. On the San Diego side are huge coal bunkers owned by the Spreckels Brothers' Commercial Company. These bunkers are among the largest on the Pacific coast, and are fully equipped for rapidly coaling any steamer lying alongside.

In the past year the United States Government has expended \$250,000 for a naval coaling station. Just north of this magnificent pier is the Quarantine Station, fully equipped with the most modern fumigating and disinfecting apparatus, and has well arranged and ample detention quarters for all vessels so held by the officers at the Quarantine Station.

WORK OF THE BOARD.

The Board has held twenty-four regular meetings in the last two years, together with sixteen special and adjourned meetings. Owing to the expected passing of bills in the Legislature pertaining to the construction of a seawall and other permanent improvements on the water front of San Diego, it has been the policy of the Board to grant but few franchises and permits until such time as these matters are settled,



WHARF SCENE, SAN DIEGO BAY.

so that no conflicting conditions may occur in any improvements that may be made by the State.

The following franchises and permits have been granted:

November 4, 1908—Permit to George A. Hensley, for machine shops and small wharf, during the pleasure of the Board.

January 18, 1909—Franchise granted to the Standard Oil Co., wharf, for commercial purposes, until August 1, 1925.

March 26, 1909—Franchise to San Diego Consolidated Gas and Electric Co., right and power to lay pipe line across and over tide lands, and through and under the waters of the bay, until August 1, 1925.

July 6, 1909—Permit to Llewlyn Allen, temporary wharf, during the pleasure of the Board.

September 14, 1909—Franchise to the Western Lumber Co., until August 1, 1925, to be used for lumbering purposes.

September 14, 1909—Franchise granted Standard Oil Co., wharf and pipe line, March 25, 1905. Revoked.

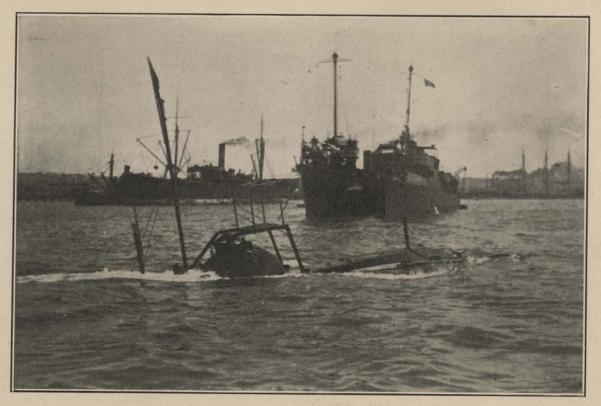
October 1, 1909—Permit granted Emerson and Taylor, temporary wharf, during the pleasure of the Board.

May 3, 1910—Permit granted San Diego Yacht Club, temporary wharf for pleasure purposes, during the pleasure of the Board.

Respectfully submitted.

CHAS. W. OESTING, F. W. JACKSON, L. A. CREELMAN,

Board of Harbor Commissioners, for the Bay of San Diego.



TORPEDO BOATS IN ACTION.