A SUBMARINE STUDY.

Thrilling Adventures Under the Sea by a Diver.

A Reporter's Experience in a Diving Dress—Visiting the Wreck of the Oregon.

NEW YORK, Oct. 25.—We who dwell upon the dry land know very little of the vast domain of Neptune that lays invisible under the rippling, rolling, heaving waves of the deep blue sea. In those realms are scenes, objects and living creatures at once queer and indescribably attractive—either for their wond rous peculiarities or marvelous beauty. In this boundless submarine territory thore are subjects of endles interest, and it is as yet unexplored, for none but professional divers have been there, and they only to a very small extent. Our little knowledge of what there is in the under-ocean world has to a great extent been furnished from such sources. Strange to say, there is no record of such a character as an amateur diver, except in the single instance of Mr. Henry A. Warren, an English gentleman of large wealth, advanced education and every accomplishment available in European universities. Chemistry has been his particular charm, and electricity his fascinating hobby. He is an expert practical electrician and has devoted much time and attention to apparatus for submarine illumination. One of the results of his labors and researches is a submarine lamp which can be carried in the hand, lowered by a weight, or—attached to a small electric motor—of his own invention, can be sent under water, under complete control by wires in any direction. For lighting up the bottom of a river or bay so that everything can be distinguished from the surface, and for suddenly illuminating the waters around a hostile war vessel, and thus insuring the explosion of a torpedo to destroy the ship, it is invaluable.

On a recent dark night Mr. Warren had invited a few friends to witness some experiments. We went on the Wall street ferry wharf at midnight, the river at that late hour being more clear of vessels than at any other time. A slender wire cable had been run over across to the Brooklyn side and sunk to the bottom, attached to it were 70 of the submarine lamps. The electric current was turned on and the apparatus began to work. At first, as we peered over the bulkhead and strained our eyes in the effort to see through the shadows overhanging the river we could see a line of tiny sparks like needle points tipped with flame, then, as the current was increased, these sparks became as large as walnuts and of a lurid intense white glow, sparkling, gleaming, flashing almost as a continuous blazing line, or like a crevice of a volcano in in its first outbreak in the bed of the river. The effect was wierd, spectral and supernatural in the extreme. Just at that time a tug boat, having a vessel in tow, came along, and when in close proximity to the submerged blaze the pilot was heard to ring his bell signals violently, at the same time yelling in terror-stricken tones to the engineer: "Back her! for heaven's sake, back her! The bottom of the river is split open! Hell has cracked through! We're all goners—sure!" At that moment Mr. Warren shut off the current and the blazing light vanished, leaving the waters under the gloomy pall of shadows. Then he started his motors with lamps in two different directions. They were invisible until far out, when each flashed out brilliant gleams that illuminated the water for a considerable distance. Dumfounded at this display the the pilot and crew looked on, speechless—and then seemed to guess at the solution of the mystery. At all events they "made the welkin ring" with vigorous and impolite abjurgations. When they related their experience to friends, subsequently, they were credited with having suffered from a spell of "jim-jams" and advised to sign the pledge and drink no more.

There is much of truth and reason in the axioms: "Life is what we make it;" and "every man makes his own world." Apt illustrations of this are seen in the methods and habits of life adopted by gentlemen of wealth and leisure. In this connection, it may be appropriate to make mention of the fact that Mr. Warner enjoys the distinction of being, probably, the only amateur submarine explorer in the world. His initial experience as a diver was in the pursuance and advancement of his electric theories and practical mechanical inventive enterprises. Frequent and protracted perigrinations under the billows inured and allured him onward and forward more and more, until he was developed into a thoroughbred amphibious sportsman, explorer and adventurer. Enamored of such adventure, he has traversed, far and near, the domain of old Neptune, visited the realms of the Næid Queen, "gallanted" her water nymphs, flirted with the mermaids, stared at sea serpants, and fled leviathans, and outwitted whales.

His speedy, trim and staunch steam yacht, appropriately named "Næid Queen," is a small floating palace, and besides its complete seagoing outfit it is supplied with extensive apparatus for diving. He is never so contented as when, clad in diving costume, he sinks beneath the surface to the bed of the ocean below, where he saunters to and fro, and finding an inexhaustible field for research and discovery. One of his fondest peculiarities is a disposition for visiting and exploring sunken wrecks of large ocean steamships.

In response to his invitation I accompanied him on one of his tours. It was one of the mildest and loveliest of September days when we started, and in a short time located the spot where the steamer Scotland went down in a collision, many years ago, in the upper bay off Governor's island. But little remains of that once splendid ocean craft, as the general government caused it to be shattered and removed by the use of dynamite. The few shattered scrawny ribs and ragged odds and ends that are visible present a doleful, sorry appearance.

Then we turned our course southward and outward, beyond Sandy Hook, out on the open sea, continuing along the Long Island shore until we anchored directly over the wreck of the ill-fated steamship Oregon. On our voyage down Mr. Warren had proposed that I should don a diving suit and accompany him down to the wreck. With some reluctance as well as misgivings I assented and got into the canvas-rubber suit. Next, the men placed the ponderous shoulder piece and helmet on, and screwed up the glass casement. I felt like one imprisoned in a patent metallic burial casket. Tied to the soles of my feet, and slung across my back were heavy ballasting weights of lead. When they helped me over the side of the vessel I felt as cumbrous as some huge, ungainly rhinoceros or hippopotamus. That was an uncomfortable feeling, but not any comparison to the sensations of dread, apprehension and and doubt, when I dropped into the water. "Ugh!—ooch! ah, yah—h!" I fairly yelled, as I plunged beneath the surface and began to descend rapidly. I yelled and roared, twice or thrice, and then realized how useless it was. But I began to get scared, and wished I had not undertaken it; and I was wild with conjectures: Suppose something should break or burst! Suppose a sword fish should come along and "jab" his sword "kerchunk" through me! Suppose a shark or a whale or a devil fish or some other infernal sea monster should think me another Jonah and gulp me down—without salt, pepper or ceremony of any sort!

Everything seemed to be whirling. I looked through the glass and saw water, water, water; and when it seemed as if I had gone down about a mile or more, my feet struck something solid with a heavy thud, which knocked the wits out of me and made me feel sure that my time had come and I was a "goner." But I was all right and safe, and near by me stood the figure of Mr. Warren, who had preceded my descent. I then saw that we stood on the steamer's deck, the smokestack and masts looming up like stalking shadows in the water. We walked up and down the entire length of the deck of the noble craft, which rests upright, half buried in the sand. We pass along to the companion-way and descend to the saloon. All would be invisible here except for the electric lamp which illuminated the whole interior, so that we could see distinctly. There was but a little surging of currents, and the sea above was almost calm. All the furniture, and everything moveable had disappeared. Some pieces of carpet and the stateroom partition remained, the doors swinging to and fro with the action of the water.

A variety of crustaceo were visible, fastened all around, and seemed to be growing all the time. There was nothing dreadful, tragic, or threatening in the appearance of anything and nothing to inspire terror, although everything was suggestive of lonliness, desolation, abandonment and destruction.

The most mournful, gloomy impressions were received while viewing the engine room and machinery, which apparently remains intact, just as it was when the vessel went down. The huge structure of iron and steel, the rods, levers, pistons, cylinders, etc., were—nearly all of them—in position, corroded, soiled and unsightly, yet they still were emblematical of tremedous strength and power, paralyzed, helpless, abandoned.

An ocean giant, entombed in Neptune's aqueous graveyard!

My companion had started for the lower cabin, and I stood watching the gleam of his electric lamp—disappearing in the distance, I stood and mused on the mutabilities of life. Probably I had stood there 10 minutes in profound thought, my mind teeming with ruminations, when suddenly there came a punch and thwack on my back, a shove against my shoulder and poke in my ribs. felt my knees tremble and my teeth chatter. I felt like howling or yelling. But that would do me no good,—I had tried it before. I had not time to continue my ruminations when my hemlet received such a "thwack"—"bang" that caused me to totter and almost fall.

Just then, as I was almost overcome with bewilderment, I received a double thwack across my shoulders which almost threw me on my knees, and, just as I ejaculated "Oh, Lordy!" and gazed through my little casement, I saw a great yellow eye, set in a huge scaley head, glaring at me through the glass. This sudden and novel apparition started up new fright, and I wondered what sort of a sea monster it might be. All that was visible to me through my narrow little window was a staring, glaring, savage, menacing, voracious-looking yellow eye, and surrounding it was a ponderous scaly creature, floating—or rather lying passive. My startled imagination made it appear like a small mountain—a whale, leviathan, or perhaps a genuine old sea serpent. My heart went "pit-a-pat," great drops of perspiration stood out upon my face and a quiver of excitement possessed me. I commenced to speculate on the possibilities of being doomed as a second Jonah, and tried to reckon the probabilities of my being gulped down that hideous monster's throat at one mouthful. I reasoned within myself that I could not be so easily swallowed, clad as I was in that diving costume of coarse rubber and canvas, with the heavy metal shoulder piece and helmet, and if I was possibly gulped down probably I would not prove such a toothsome morsel as the whale had anticipated. All I could do was to hope that his whaleship would swim along the coast until he reached Coney Island or Long Branch, and there cast me up—on the beach—whence I could find may way home. All this time, while these thoughts rushed to and fro in my mind, that glaring, staring, fiendish eye was mercilessly rivited upon me. Suddenly there was a commotion in the water, and the horrible fishy incubus swam away; and as it floated off in the light, I discovered it to be a harmless, innocent, huge sea bass, about four feet in length, and very likely its curiosity as to what manner of creature I might be was as great as my frightful apprehension of its intentions toward me.

Just then, greatly to my relief, my companion returns, gives the signal, and we are drawn up to the deck of our staunch craft, released from our diving dress, and soon are steaming briskly along, "homeward bound."

SAINT C.

THE MANUFACTURE OF GAS.

A Simple Explanation of the Way Illuminating Gas is Made.

New York Graphic.

How few people can intelligently explain some of the most ordinary things in every day life. An official of the city gas works was heard to say not long ago that if he might judge by the number of times he was asked for information not more than two people in ten know how common illuminating gas is made. They all seem to understand, he said, that it comes out of soft coal, but they are ignorant of the process by which it is extracted. We do not doubt this at all, for, as we have said to you several times, it is the common things that we are apt to overlook in our search for information. You will understand, therefore, why we select subjects to talk about with which you and everybody else ought to be familiar.

Now, let us give you a simple explanation of gas-making. Break up a piece of bituminous coal into small fragments and fill the bowl of a clay pipe with them. Cover the mouth of the bowl with wet clay and then thoroughly dry it. Put the bowl of the pipe into a fire where it will get red hot and you will soon see a yellowish smoke come out of the stem, and if you touch a light to the smoke it will burn brightly, for it is nothing more or less than the gas from the coal.

You can purify and collect this gas in a simple way. Fill a bottle with water and turn it upside down in a bowl of water. You know the water will not run out of the bottle because the air pressure on the water in the bowl will prevent it. Put the end of the pipestem under the mouth of the bottle, and the gas will bubble up through the water into the bottle, gradually displacing the water, and if the pipe were large enough to make a great deal of gas the bottle would be entirely filled with it.

You have seen the immense quantities of coke which they have at the gasworks; that is what is left of the coal after the gas has been burned out of it. Coke is carbon, only a small part of what was in the coal having gone off with the gas. Take the clay covering off your pipe and you will find the bowl filled with this coke.

Now, that is precisely the way gas is made in large quantities at the gasworks. Instead of pipe bowls they use big retorts, and these are heated red hot by furnaces, for the fire must be outside of the retorts. Heating coal red hot in a closed retort is different from burning it in the open air. A large pipe from the retort carries off the product of the coal, consisting of steam, tar, air and ammonia, as well as gas. The ammonia and tar go into tanks, and the gas into coolers, and then over lime, which takes up the acids in it, into the immense iron gas holders which you have seen at the works.

The holders are open at the bottom, and stand, or rather swing, in tanks of water, being adjusted by means of weights. As the gas comes into them they rise up out of the water, but the bottoms are always submerged, so that the gas can not escape. The larger gas pipes, or mains, as they are called, connect with the holders and conduct the gas through the streets to the houses where it is used. The pressure is given to the gas by the weight of the iron holders, which are always bearing down on the gas they contain.

KIDNEY DISEASE.

Mistaken Symptoms and the More Reliable Ones.

Things Which Cause Unnecessary Alarm—Results Ascribed to Other Reasons than Kidney Trouble.

"The man who doctors himself has a fool for a patient." This is true in actual disease or severe derangements, but there are many trifling ailments which can be overcome with simple means, with which every one should be familiar. In constipation, for instance, remedies are found on the table; in other words the trouble can, in nearly all cases, be overcome by

PROPERLY REGULATING THE DIET.

Dietetic treatment is often all that is necessary in numberless other afflictions, and surely it can be safely applied by a person possessing a reasonable amount of intelligence. To keep within the limits of safety, one must draw the line at drugs. They should not be used except by those who have a full knowledge of their action. Very many people are unmindful of the dangers of "physic tippling," and do themselves much harm by it. All medicines are dangerous unless taken under proper conditions and in correct doses. Chlorate of potash, which is a popular remedy for sore throat, is considered harmless, and is, therefore, often taken in much too large quantities. Death in consequence of an overdose occurred in this city some years ago. Hence, in attempting self-treatment, let drugs alone, is a rule which all will do well to observe. All things considered, it cannot be, by any means, held that a little knowledge of medicine is a dangerous thing. And instead of discouraging the non-professional against studying the causes, nature and symptoms of disease, he should be encouraged to do so, for more reasons than we have already given.

"My kidneys are troubling me" is a complaint which one frequently hears made. Probably there are no organs in the body which are oftener wrongfully accused of being refractory than the kidneys, a fact due to a general ignorance of the symptoms which they excite when disturbed or diseased. Doubtless more than nine-tenths of all the cases which the patients themselves believe to be kidney trouble are actually due to disorders of the liver and stomach. A cloudiness of the excretion is assumed to be evidence of kidney disturbance, and yet, that appearance is much the oftenest noted in patients who are simply bilious. In fact, in kidney trouble alone, unless of an acute character, the excretion is seldom cloudy. When the bladder is affected then that change is noted. Persons who sleep in cool rooms in winter are frequently disturbed by the thick appearance of the excretion, and led to dose themselves, notwithstanding the fact that they are feeling well. That condition observed is really of no consequence, and appears in health; the solid constituents are simply precipitated by the action of cold, and readily dissolved again if heat is applied. A sediment in the excretion is common in hot weather, and generally appears during the subsidence of a febrile attack, even if slight. Another symptom which is almost always construed as an evidence of "kidney trouble" is a pain in the back. That is a very common error. Pain may occur in diseases of the kidney, but it rarely does so, and hence alone the symptom is really of very little importance. In hot weather the quantity of fluid passed is much less than in cold weather, unless liquids in a proportionately greater quantity are taken into the stomach. A quart and one pint is about the normal for twenty-four hours. If the quantity falls much below that, and no reason such as we have stated, appears for it, then it is evident that the kidneys are less active than they should be. One popular remedy in those cases is gin, which cannot be sanctioned. Another is sweet spirit of nitre. A few correct doses of that taken at intervals, can do no harm. From one-half to one teaspoonful in a tumbler of water is the dose for an adult, and it may be repeated, if needed, every three or four hours until three or four doses have been taken. Prolonged use is quite certain to upset the stomach. Better than either of these, to stimulate the action of the kidneys, is cream of tartar water. The proper way to prepare it is this: To a quart of boiling water add a tablespoonful of cream of tartar, the juice of one lemon and two tablespoonfuls of sugar. Let it stand on ice until cool. If this is taken freely it will have the desired effect. The kidneys fail to properly perform their functions in certain diseases—as typhoid fever—aside from those of the kidneys themselves. Occasionally in persons who feel well those organs appear to be slightly inactive for a day or two at a time, and then the trouble passes off. Only in such cases is self-treatment justifiable. If the derangement lasts for a longer time, or the patient is otherwise ailing, a physician must be consulted, for there is danger in delay.

Being "obliged to get up often at night" is considered by many an evidence of kidney disorder. That need points to the bladder as the seat of the disturbance, and if continuous the advice of a physician is imperative. An excessive action of the kidneys, much above the normal quantity stated, if persisted for several weeks, would indicate diabetes. Occasionally the quantity is much increased without that disease being present, but only for a short time—a day or two—unless the quantity of fluids taken is unusually large. Greater activity of the kidneys is quite a common sympton in recovery from a bilious attack, and the patient always feels better for it.

The true symptoms of kidney disease are not many, but they are very different from those which are generally accepted.

The term "Bright's disease" is used to designate a variety of important changes in the kidney. It may be acute or chronic. The first symptom which usually appears in the acute attack is dropsy, which exhibits itself by a slight puffiness in the eyes. At the same time there is more or less fever, which is, in some cases, preceded by chills or chilly sensations. There are also loss of appetite, thirst, great restlessness, headache and occasionally pain in the loins. Nausea and vomiting are frequently early symptoms. The kidneys are inactive, the quantity of excretion is usually scanty, and at times has a smoky appearance. These are the principal signs which are manifested in an attack of Bright's disease. As a rule the chronic form of this disease begins slowly, stealing on, as it were, insidiously. Probably in a large proportion of cases it exists for many months before it is discovered, and in the meantime the victims consider themselves perfectly well. Often the first signs to excite uneasiness are a general loss of strength and a growing paleness or sallowness of complexion. There is also disinclination to exertion, fatigue being easy. Occasionally the first symptom is dropsy, appearing in a puffness under the eyes, or a slight swelling of the feet and ankles. This is a prominent symptom in some cases, but in others it is never very marked. In all forms of Bright's disease symptoms referable to the digestive system are more or less pronounced; indigestion or dyspeptic disorder is common. Headache is also an exceedingly common symptom and often it is one of the first to appear. A frequent complaint is trouble with the sight, which suffers slow impairment, and the patient eventually has recourse to glasses.

These are in brief some of the early signs of "Bright's disease." As will appear, they are not distinctive, for none of them point directly to the kidneys. The most accomplished physician cannot depend upon these or other symptoms alone, he would need surer evidence before he told a person his kidneys were affected. The only certain means is chemical analysis and microscopical examination of the excretion. The public should remember this one important fact, and never accept a physician's opinion as of value until he had secured this positive proof.

TOBE RID OF FLIES.

A Naturalist Tells Why the Screens Do Not Keep Them Out.

New York Mail and Express.

"How do the flies get into the house with screens on all the windows and doors?" is a question asked by hundreds of housewives who are annoyed by the pests. A naturalist who has looked closely into the habits of the fly said: "The swarms of flies that are so troublesome during the latter part of the summer and in the fall hatch out in the house. The screens shut them in instead of keeping them out, and really do more harm than good. It is physically impossible to keep every fly out of the house in summer time; but by exercising a little care thousands of them may be excluded.

"Nearly all of the trouble is caused by about a dozen sluggish specimens that emerge from their winter retreats on the first warm days of spring. They may be found on the sunny window of any room not in constant use. They should be killed at once, as they deposit the eggs from which the millions of summer flies are hatched. They are prolific insects and one old fly is capable of populating a whole house with progeny in a single summer. Instead of killing the first fly of the season many people make a pet of it. Its sluggishness and half-frozen condition excite pity, and it is not unusual for the most careful housekeeper to feed and warm it out of pure tender-heartedness. A folded towel should be kept handy and the early flies killed as soon as they appear. Then if care is taken to leave no particles of food and sugar scattered around the kitchen and dinning-room, and to keep all substance on which flies feed covered there will be no trouble from flies. Some families who take these precautions even dispense with screens in the windows and doors. If the flies come in from outdoors, they find nothing to live on and seek more congenial quarters. It is best to use screens, however, as damp and rainy weather invariably drives flies into the house, and they are troublesome until it is clear and warm outside."

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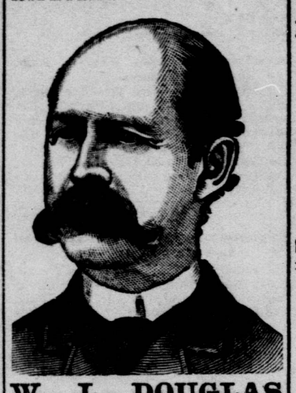

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Dr. E. G. Johnson, who recently spent eight months in the principal hospitals and leading medical institutions of New York City, having resumed practice in Seattle, is prepared to treat all Genito-Urinary Diseases, all Skin and Blood Diseases, all ailments arising from a Weakened Nervous System, all Diseases of the Kidneys, Heart and Lungs, all Rectal Diseases, and all Diseases Peculiar to Women, according to the latest and most improved methods. Consultation Free. Office—rooms 59 and 60, New Yesler Block, Mill street.

Seattle, Lake Shore & Eastern Ry.

CHANGE OF TIME.

ON AND AFTER SUNDAY, OCTOBER 28, 1888, trains will depart from and arrive at Seattle as follows:

	Leave.	Arrive.
Raging Riv. and way stations	B 7:30 a m	B 6:45 p m
Snohomish and way stations	B 9:30 a m	B 3:30 p m
Suburban trains, connecti'g with boats on Lake Wash. at Yesler	B 1:30 p m	B 3:30 p m
Gilman and way stations	A 4:00 p m	A 9:15 a m

"A" daily. "B" daily except Sunday.

W. J. JENNINGS, Gen. F. and P. Agent.

THE GREAT TRANSCONTINENTAL ROUTE.

Northern Pacific RAILROAD.

VIA THE

Cascade Division, Now Completed, Making it the Shortest, Best and Quickest.

The Dining Car line. The Direct Route. No Delays. Fastest Trains. Lowest Rates to Chicago and all points East. Tickets sold to all prominent Points throughout the East and Southeast. Through Pullman Drawing Room Sleeping Cars. Reservations can be secured in advance.

To East Bound Passengers:

Be careful and do not make a mistake, but be sure to take the

Northern Pacific Railroad,

And see that your ticket reads via. this line, St. Paul or Minneapolis to avoid changes and serious delays occasioned by other routes.

Through emigrant Sleeping Cars run on regular express trains full length of the line. Berths free. Lowest rates, quickest time.

General Office of the Company, No. 1 Washington st., Portland, Oregon.

A. D. CHARLTON, Ass't Gen. Pass. Agt. No. 2 Washington St., Portland, Or.

W. B. SPENCER, Ticket Agent, Seattle, Wharf.

A. CHILBERG, Ticket Agent, Seattle.

O. R. & N. CO.'S STEAMERS

WILL LEAVE SEATTLE CITY DOCK daily for Tacoma at 2 a. m. and 3 p. m.

For Victoria—Daily, except Sunday, at 11:15 a. m.

For Olympia—Daily, except Sunday, at 2 a. m.

Touching at intermediate points on all routes.

Seattle, Whatcom & Semiahmoo Route.

STEAMER GEO. E. STARR

Leaves Seattle at 9:30 p. m. Mondays, Wednesdays and Fridays. Arrives at Whatcom at 11 a. m. Tuesdays, Thursdays and Saturdays. Returning, leaves Whatcom at 1 p. m. Tuesdays and Thursdays, and on Sundays at 7 a. m. Arrives at Seattle at 2 a. m. Wednesdays and Fridays and on Sundays about 9 p. m.

Leaves Whatcom for Semiahmoo Saturdays at 1 p. m. Leaves Semiahmoo for Whatcom Saturdays at 5 p. m., arriving at Whatcom about 9 p. m

NOTICE—Steamer lands at all regular landings except Oak Harbor, Laconner and Fidalgo.

U. S. Mail Steamer Hassalo

Leaves Seattle for Whatcom and all way landings Sundays, Tuesdays and Thursdays at 11 p. m. Arrives at Whatcom Mondays, Wednesdays and Fridays at 5 p. m. Returning, leaves Whatcom same days at 8:30 p. m., arriving at Seattle Tuesdays, Thursdays and Saturdays at 2 p. m.

W. H. HOLCOMB, Genl. Manager.
C. W. JOHNSON, Superintendent.
A. L. MAXWELL, Genl. Pass. and Ticket Agent.
J. R. POLLEY, Local Agent, City Dock.

DAY BOAT.

Fast Steamer

W. K. MERWIN,

Leaves Yesler's wharf for

Whatcom

At 7 a. m., touching at Clinton, Holmes harbor, Coupeville, Utsalady, Laconner, Samish and Blanchard's, every Tuesday and Friday.

For freight or passage apply at W. S. & T. Co.'s office, Yesler's wharf. je22

Washington Steamboat Transportation Company.

CARRYING THE U. S. MAIL.

SEATTLE-PORT TOWNSEND ROUTE.

STEAMERS ANDERSON OR EDITH WILL run daily between Seattle and Port Townsend, leaving Seattle at 10:30 pm, touching at Port Madison, Port Gamble and Port Ludlow. Returning—Leave Port Townsend daily (except Sunday) at 9:30 a. m.

SEATTLE-WHATCOM ROUTE.

Steamer Washington leaves Seattle, Sunday, Tuesday and Thursday at 9 p. m. touching at Clinton, Coupeville, Oak Harbor, Utsalady, Laconner, Anacortes, Guemes Samish, Fairhaven, Bellingham and Sehome. Returning—Leaves Whatcom Mondays, Wednesdays and Fridays at 5 p. m.

SEATTLE-SKAGIT RIVER ROUTE.

For freight and passage apply at company's office on Yesler's Wharf.

H. F. JACKSON, Ass't Manager.

PACIFIC NAVIGATION COMPANY.

THE STEAMER

Skagit Chief

LEAVES HARRINGTON & SMITH'S wharf for San Juan Islands, touching at Clinton, Utsalady, Stanwood, LaConner, Friday Harbor and Roche Harbor every Sunday and Thursday.

For freight or rates apply on board steamer, or to HARRINGTON & SMITH, Agents.

HENRY BAILEY, Master.

PACIFIC NAVIGATION COMPANY.

THE STEAMER

Henry Bailey

LEAVES YESLER WHARF FOR TULALIP, Stanwood, Mt. Vernon, Sterling and intermediate points every Saturday and Wednesday.

For freight or rates apply on board steamer or to Geo. H. Foster, agent.

S. T. DENNY, Master.

STEAMER W. F. MUNROE,

(Carrying U. S. Mail,)

Leaves Seattle for Edmunds, Mukilteo, Marysville and Snohomish

Daily, except Sunday.

For freight or passage inquire on board or at Yesler wharf.

C. D. BROWNFIELD, Manager.
GEORGE H. STEE, Agent Seattle.

FLEETWOOD

LAID UP.

Winter Time Table

WILL BE GIVEN

In a Few Days.

Pacific Coast Steamship Co.

One of the ELEGANT A1 IRON STEAMSHIPS Of this company will leave Ocean Dock, Seattle, every Friday at 6 o'clock p. m. (Passengers received on board at 5 p. m.)

For Port Townsend, Victoria AND SAN FRANCISCO.

Queen of the Pacific.....Nov. 9.
Umatilla.....Nov. 16, 30, Dec. 14, 28.
Walla Walla.....Nov. 23, Dec. 7, 21, Jan. 4.

Returning, steamers leave San Francisco every Friday at 9 o'clock a. m.

FOR ALASKA.

Steamers leave as above fortnightly for Wrangel, Juneau, Sitka and other Alaskan ports.

Idaho.....Nov. 7, Dec. 3, 31.
Ancon.....Nov. 19, Dec. 17, Jan. 14.

FOR FREIGHT OR PASSAGE APPLY TO THE COLUMBIA & PUGET SOUND R. R. CO.

W. B. SPENCER, Agent.

H. McLELLAN, Puget Sound Supt. P. C. S. S. Co. Seattle.

Canadian Pacific RAILWAY.

THE TRUE TRANSCONTINENTAL ROUTE BETWEEN THE PACIFIC AND THE ATLANTIC.

ITS PASSENGER EQUIPMENT IS THE finest in the world, consisting of Luxurious Sleeping Cars, having drawing, smoking and bath rooms; Comfortable and Clean Colonist Cars, with Sleeping Berths for holders of second class tickets, and the most modern style of day coaches.

Its Dining Cars and Hotels provide the best quality of food in unlimited quantity at reasonable rates.

The Variety and Grandeur of Scenery along its line is unequaled, and in the details of track, train service, etc., nothing is omitted that can add to the Safety and Comfort of its patrons. All in all, it gives the best and most servicable line of travel, whether for business or pleasure, between Portland, Tacoma, Seattle, Victoria and all Pacific Coast Points, and Winnepeg, Minneapolis, St. Paul, Chicago, St. Louis, Ottawa, Toronto, Montreal, Boston, New York and all Eastern Cities.

Through Tickets are Issued to all Principal Points in the United States, Canada and Europe at Lowest Rates.

For detailed information apply to the following agents of the company:

C. G. McCORD, 6 Washington st., Portland, Or.
E. W. McGINNESS, Seattle, W. T.
E. E. ELLIS, Tacoma, W. T.
D. E. BROWN, District Freight and Passenger Agent, Vancouver, B. C.

Correspondence respectfully solicited.

Canadian Pacific Navigation Co.

(LIMITED.)

STEAMER PREMIER

BOUND SOUTH.

Leave	Arrive
Vancouver, Monday & Thursday...2 p m	Townsend, Thursday & Monday..9:30 p m
Townsend, Monday & Thursday..11 p m	Seattle., Friday and Tuesday...2:00 a m
Seattle, Tuesday and Friday.....9 a m	Tacoma, Friday and Tuesday.....12 noon

BOUND NORTH.

Leave	Arrive
Tacoma, Tuesday & Friday.....3 p m	Seattle, Tuesday and Friday.....6:00 p m
Seattle, Wednesday & Saturday...6 a m	Townsend, Wedn'sdy & Saturday..9:00 a m
Townsend, Wedn'sdy & Saturday...10 a m	Vancouver, Wednesday & Satdy..5:30 p m

DAYS OF DEPARTURE FROM SEATTLE.

Wednesdays and Saturdays.

DAYS OF ARRIVAL AT SEATTLE.

Tuesdays and Fridays.

JOHN A. O'BRIEN, Master.
F. J. CHURCH Agent at Seattle.
JOHN IRVING, Managr. C. P. N. Co. Ltd.

TO SAN FRANCISCO, CAL.

BY WAY OF THE

Southern Pacific Company's LINES.

THE MT.