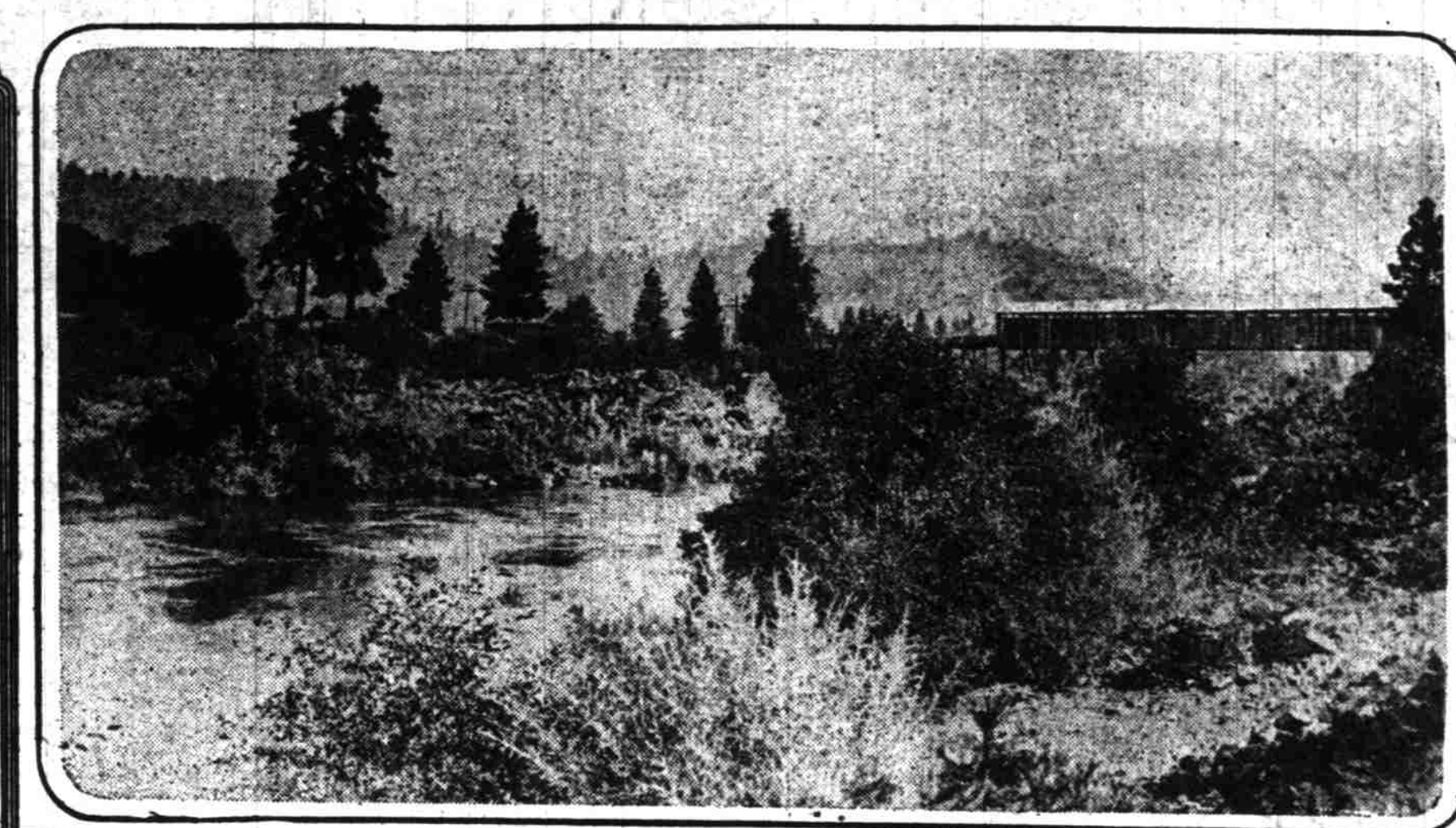


WATER POWER POSSIBILITIES ON O.-C. GRANT LANDS ARE UNDER SURVEY



Geological Survey Undertakes Classification of Power Sites

UNDER an act of congress approved June 9, 1916, about 2,300,000 acres of Oregon and California railroad grant lands reverted to the government. This act also provided for the classification of these lands, as follows:

Class 1. Power sites, which shall include only such lands as are chiefly valuable for water-power sites, which lands shall be subject to withdrawal and such use and disposition as has been or may be provided by law for other public lands of like character.

Class 2. Timber lands, which shall include lands bearing a growth of timber not less than 200,000 feet board measure on each 40-acre subdivision.

Class 3. Agricultural lands, which shall include all lands not falling within either of the two other classes.

The classification of the O. & C. R. grant lands with respect to their value for water power purposes is now being made by the United States geological survey. The classification of these lands as to their value for timber and agriculture is being made by the United States general land office.

The O. & C. R. grant lands cover alternate sections in an area 60 miles wide extending from Columbia river to the California state line. All the

lands lie west of the Cascade range except a small area in the Klamath river basin. Much of this land lies on the high areas between the principal rivers and is chiefly valuable for the growth of timber thereon, whereas that which lies at lower elevations and nearer the main rivers is more valuable for agriculture, having less than 300,000 b. m. to the 40 acres.

Many of the streams that head in the Cascade range and flow west to the Pacific are recognized as valuable water power streams. The geological survey by field examination is determining roughly the possibilities for power development on each of the streams affected by the O. & C. grant lands. A reconnaissance report has been completed by the survey's field engineer covering the possibilities for development of power in the Klamath river basin below Klamath Falls in Oregon, and covering the basins of the Rogue and Umpqua rivers. It is the plan of the survey to prepare reports on all of the important streams west of the Cascade range in Oregon, but on the streams in remote localities, especially those west of the Coast range, very little data is available. In only a few instances have soundings been made, while the possibilities for storage and the fall of these streams are practically un-

known. At present the survey's estimates of the water power value of the coast streams must be roughly approximate, but it is hoped that at a later date detailed surveys can be made to determine the fall in these streams and the possibilities for storage in their respective basins.

It has been stated that areas valuable for agriculture are to be locked up by placing these lands in power site reserves. The final power site reserves will include only such lands as will be affected by the development of the available water power. By far the greater portion of these lands are worthless for any other purpose other than of power development. A fair idea of the character of the land that may be reserved for water power purposes can be had by studying the pictures submitted with this statement. The dam sites are located in rocky canyons, and the lands on which water power conduits may be located are usually on steep mountain sides sparsely covered with scrub timber; land so steep and so rough as to make it unsuitable for agricultural purposes.

The classification of the O. & C. grant lands as to their value for power development is being made by E. C. La Rue, hydraulic engineer, United States Geological Survey, Portland, Oregon.

Photographs illustrative of water power possibilities in or near the O.-C. grant lands. Above, left to right—Mill creek falls, Rogue river; Hell Gate damsite, Rogue river; Rogue river near Grants Pass. Below, left to right—Damsite on Klamath river; Kirby damsite on Illinois river.

Wicklund and his crew got out the power boat, but it was almost impossible to stand against the terrific force of the gale. The wind caught the boat like a playing and turned it over, but no gale can keep a self-righting surf boat wrong side up. They made their way to the Cape Disappointment station. The boat took its way over the storm-tossed waves, looking through the semi-darkness and wind-driven spume for the wreck. It was not until 9:10 o'clock that the naval radio station located the wreck and gave the location to the stations.

Meanwhile, from Astoria, the bar tugs Fearless, Goliath, Onenta and Tatosow were sent out to attempt to locate the wreck and take off the men. The bar was a rolling fury of storm-lashed waves.

The tug Onenta, with Captain Anderson at the wheel, crossed out over the bar, but she saw she could not live in the huge seas that were rolling shoreward. The seas rolled clear over her. They broke off her ventilators as if they had been made of pasteboard, so she turned about and went with the gale in place of bucking it. The other tugs made the attempt to get out, but couldn't make it. Mrs. Wicklund and the other folks were watching the boat their men folk were in, thrown high and overturned and, strain their eyes as they would, they could not see it again and, sick with dread, they concluded it had foundered.

The Rosecrans lay under North Head exposed to the full fury of the storm. At 10:30 o'clock her funnel went by the board, and only her masts were visible at times, as the waters dashed completely over her hull. The life saving crews from Fort Stevens and from Canby were both out trying to reach the wreck.

In the old days the crews depended upon oars, but these were power boats weighing nine tons, with self-operating engines enclosed in water tight compartments, and both boats were self-righting, self-bailing, and as near indestructible as it was possible to make them.

In spite of their staunchness, they were getting terrible punishment from the sledge-like blows of the racing seas. Captain Wicklund's boat was boarded by a tremendous sea and when it emerged from the wall of green water that had buried it, one of the crew was missing. They saw him far astern in the yachts' smother now rising far above them on the surface of a wave and now going from eight in the valleys between the racing hills before they could bring the boat around and go after him. Drawing alongside two of the crew reached over and got him aboard.

Meanwhile Captain Wicklund's crew had been joined by the life boat from Cape Disappointment. Shouting to each other was out of the question, for the gale tore the words out of one's mouth and nearly strangled one. A tremendous sea swept the boat of the Cape Disappointment crew. Seeing a streak of smoother water caused by the oil from the Rosecrans, Captain Rimers, in charge of the crew from Cape Disappointment, tried to follow the oil streak to the wreck, but his boat was caught in the vortex of two meeting waves, and the boat turned a complete somersault. Captain Rimers had hold of the stout brass railing of the boat. The water tore him loose, and when he was later picked up, he still had a foot or two of the heavy brass railing in his hand that he had torn loose when he was washed overboard. When the boat went ashore over end, three of its crew were thrown into the sea, and drifted away. The boat

under Captain Wicklund, stood by and picked up all three of the men lost overboard from the other crew.

As long as he had power to send, L. A. Prudhault, aboard the Rosecrans, stuck by his wireless and sent out "S. O. S." One of his messages picked up from the air, was "Striking the bar, and breaking to pieces." Almost the last message received from the doomed ship was caught by the wireless operator of the Willamina, enroute from Honolulu to San Francisco. Hearing the "S. O. S." the Willamina's operator flashed back: "Who are you? What is the trouble? Where are you?" The crackling dashes and dots were getting so faint that he could hardly hear the faint buzzing of the Rosecrans' answer. "Ashore at mouth of the Columbia. Guess it's all off. Ship's back is broken."

The last message to come from the Rosecrans, was "We are breaking to pieces. Good bye." For three hours Captain Wicklund's boat circled around the wreck. Part of one mast was still standing, and three men were clinging to the broken mast-tangled rigging of the broken mast. Despairing of being able to maneuver their boat so as to board the wreck, Captain Wicklund motioned the men to jump. Two of the men jumped and were caught by the waves and tossed like helpless marionettes. They were picked up by Captain Wicklund's crew. The other man hesitated, but finally jumped. He jumped short, struck his head on a stanchion, and was killed. His body was picked up as it was swept away from the wreck by the waves.

The life boats had been out since 5 a. m. and it was now 3:30 in the afternoon. In attempting to come about when rescuing the men who had jumped from the tangled rigging, two of the life saving crew had been washed overboard, but were recovered.

In the terrific battering of the boat of the Cape Disappointment life saving crew had become disabled. In one of her end-for-end somersaults the engine in its encased compartment had torn loose, and was rattling about like a shot in a child's rattle. As the shoreward-rushing waves washed it over the bar, the tug Fearless, seeing its plight, came out and took it in tow and took it to Astoria.

Shortly before the funnel went by the board on the Rosecrans, Captain Johnson and several of the sailors were washed overboard. They went out to sea as the safest chance of being picked up. They reached the lights at midnight, after a constant fight for their lives since 5 o'clock in the morning. Their boat was sunk shortly after they were taken aboard the lights.

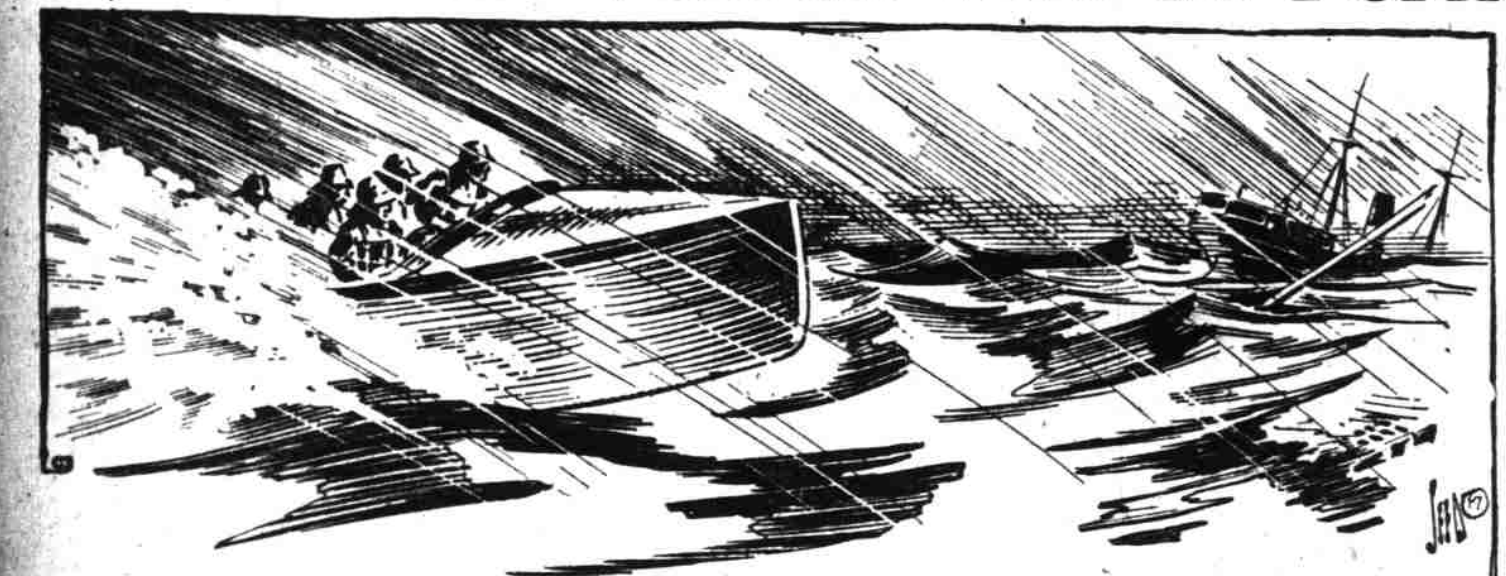
For three days the storm raged, and they remained aboard the lights. Of the crew of between 30 and 40 aboard the Rosecrans, only three were saved. Fred Peters, a native of Boston, but whose home was in San

Francisco, who was washed ashore on a plank; Joe Stenning, a sailor, and Eric Lindmark, the ship's carpenter, who were rescued from the wreck.

Captain L. F. Johnson, in command of the Rosecrans, was a young man, being 29 years of age. His body was found on the beach with the bodies of some of the other members of the crew not far distant. The crew of the Rosecrans who met the fate of so many who go down to sea in ships, consisted of the following members: Captain L. F. Johnson; first officer, Thomas Mullin; second mate, Hans Tonda; third mate, C. R. Palmer; chief

engineer, Richard Grudell; first assistant engineer, J. A. McPherson; second assistant engineer, J. L. Adams; chief steward, Fred Wilson; wireless operator, L. A. Prudhault; boatswain, Peter U'Ren; carpenter, Eric Lindmark. The crew came from many lands, as is evidenced by such names as Angus McDonald, Hjalmar Rusten, Olsen, Murphy, Severin Gjosen, O'Hare and Stenavig.

How Coast Guards Save Lives When Vessels Are in Peril



By Fred Lockley.

TALK to any old salt water sailor and he will tell you that ships are like women. Each ship has her own individuality, her own character. Some are flighty and erratic, while others are true as steel and can be trusted in all sorts of stress and storm. Just as there are more bawdy drivers than bawdy horses, so there are more ships that come to grief through the fault of their master than through any fault of their own. A good man will take a sinking ship into port, while a bad master will wreck a staunch ship. I happened to be near at hand when the Hunter and Ellipse were wrecked on the Romanoff Point on the Alaskan coast. In one case it was a drunken master and in the other, it was a man who had no knowledge of the coast.

The old days when men lit false flares or built false beacons on treacherous coasts to cause wrecks, are gone by, and yet with all the modern methods of protecting mariners, there is a constant wastage of lives and ships through wrecks and a ten-fold greater wastage of lives and ships through deliberate intent. For months Neptune has seen the bottom of his domain sprinkled daily with the victims of the submarine.

With all the news of the destruction of ships one turns with relief to man's effort to save ships instead of sinking them. Recently I spent an afternoon with Captain Oscar S. Wicklund in command of coast guard station number 211, at Fort Stevens, Or., formerly known as the Point Adams life saving station.

Captain Wicklund is a fine, up-standing looking man, but extremely modest. He will talk as long as you want him to about his children, but

he is stricken with silence when you ask him about himself and his own deeds.

He was born in Sweden, and when he was 17 years old he came to this country. He knew the sea and loved it. He was not strange that when he was of age he should enter the life saving service. He has made it his life work, having spent 27 years in the service. With his blue eyes, his brown hair, his ruddy complexion, his erect and soldierly carriage and his muscular well-knit frame, he looks more like 35 than 46. Look over his book or journal of daily occurrences, and you will see that his life is not all sunshine, for during the past 25 years he has had occasion to go out with the life boat to rescue between 600 and 700 boats in distress.

Being located at the mouth of the Columbia, accounts for most of these rescue trips, for when there are several thousand salmon fishers plying their trade out on the bar it is not strange that when a sudden squall sprays up some of them should come to grief. In the old days much of their trouble was caused by the betterment caused by liquor. A good boatman, his faculties dulled by the life would carry his sail too long in the rising gale and over would go his boat. Many is the time, however, that the crew has gone out in an all-day fight with the elements for the lives of sailors on some boat being pounded to pieces along the shore.

I tried to get Captain Wicklund to tell me of some of the wrecks, but he dismissed them with a phrase or two.

"Tell me of the worst wreck you have ever had to do with," I asked. "That will be the Rosecrans," he answered. "My crew certainly did good work on that occasion." By promising not to quote him, I secured the story of the wreck of the Rosecrans. "My crew certainly did good work on that occasion," I will not tell the story as it was told to me, though I would like to give it in the captain's simple, direct and graphic style. Instead I will tell the story in my own words, though I cannot hope to reproduce the atmosphere of the sea that breathed all through the narrative as it was told me.

After several reminders, Captain Wicklund went into the office and brought out two medals that had been awarded him for his action in saving lives at the wreck of the Rosecrans. One was a beautiful gold medal awarded by congress on which was engraved the inscription "To Oscar S. Wicklund for Heroic Deeds, Wreck Rosecrans, January 7, 1913."

Just before dawn on the morning of January 7, the Rosecrans with 18,000 barrels of oil aboard, bound for Monterey, went ashore on Peacock Spit. The Rosecrans was known and dreaded among sailors. The superstitious deep sea tars would have none of her, as they considered her a mariner's curse. She was built in 1883 at Glasgow, being christened "The Metvan Castle." She met with hard luck, and was taken over by a British company and renamed the Columbia. She was wrecked, picked up at sea, salvaged and rebuilt and purchased by an American company and became the American steamer Columbia. During the Spanish-American war she was purchased by the American government, renamed the Rosecrans and became a government transport. After the close of the war the department disposed of her to the Associated Oil Co. She was wrecked, but was recovered, towed into port and rebuilt. Some time later she was burned to the water's edge. She was again overhauled and entirely rebuilt and put into service. Seven months after being wrecked she was burned, and five months after being rebuilt the last time, she met her end on Peacock Spit.

It was supposed that the man at the wheel, being inexperienced, mistook the North headlight for the lightship, and so left the channel and struck on Peacock Spit. At 5 o'clock in the morning, Captain Wicklund received a wireless message from Astoria, saying that the Rosecrans was in distress. Astoria was unable to give the location of the wreck. If the Columbia lightship had been equipped with wireless, undoubtedly many of the men who were drowned could have been rescued, for the lightship could have given the exact location at once, when the Rosecrans first struck. A 75-mile gale was blowing. Captain

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