

BULK GRAIN PLAN HELD NECESSARY TO ADVANCE PORT AIMS

Inland Grain Growers to Handle Cereal in Bulk and Portland Has Opportunity.

BOND ISSUE IMPORTANT

Value of Terminal Elevator Facilities Here Is Explained by G. B. Hegardt, Dock Commission Chief Engineer.

From the proceeds of the \$3,000,000 public bulk grain elevator bond issue, which the voters of Portland are asked to approve at the election June 4, the construction of a comprehensive terminal to facilitate principally the handling of wheat, but including other commodities, for lack of which this port now suffers is proposed.

So far no opposition to the plan has developed, all classes recognizing that Portland must provide these facilities or lose leadership to Seattle as a northwest grain terminal. Grain growers of the Inland Empire have announced intention to handle grain in bulk extensively hereafter. They are building local bulk elevators, and declare they will ship only to the terminal which provides facilities.

The following information about the plan has been furnished by G. B. Hegardt, chief engineer of the commission of public docks.

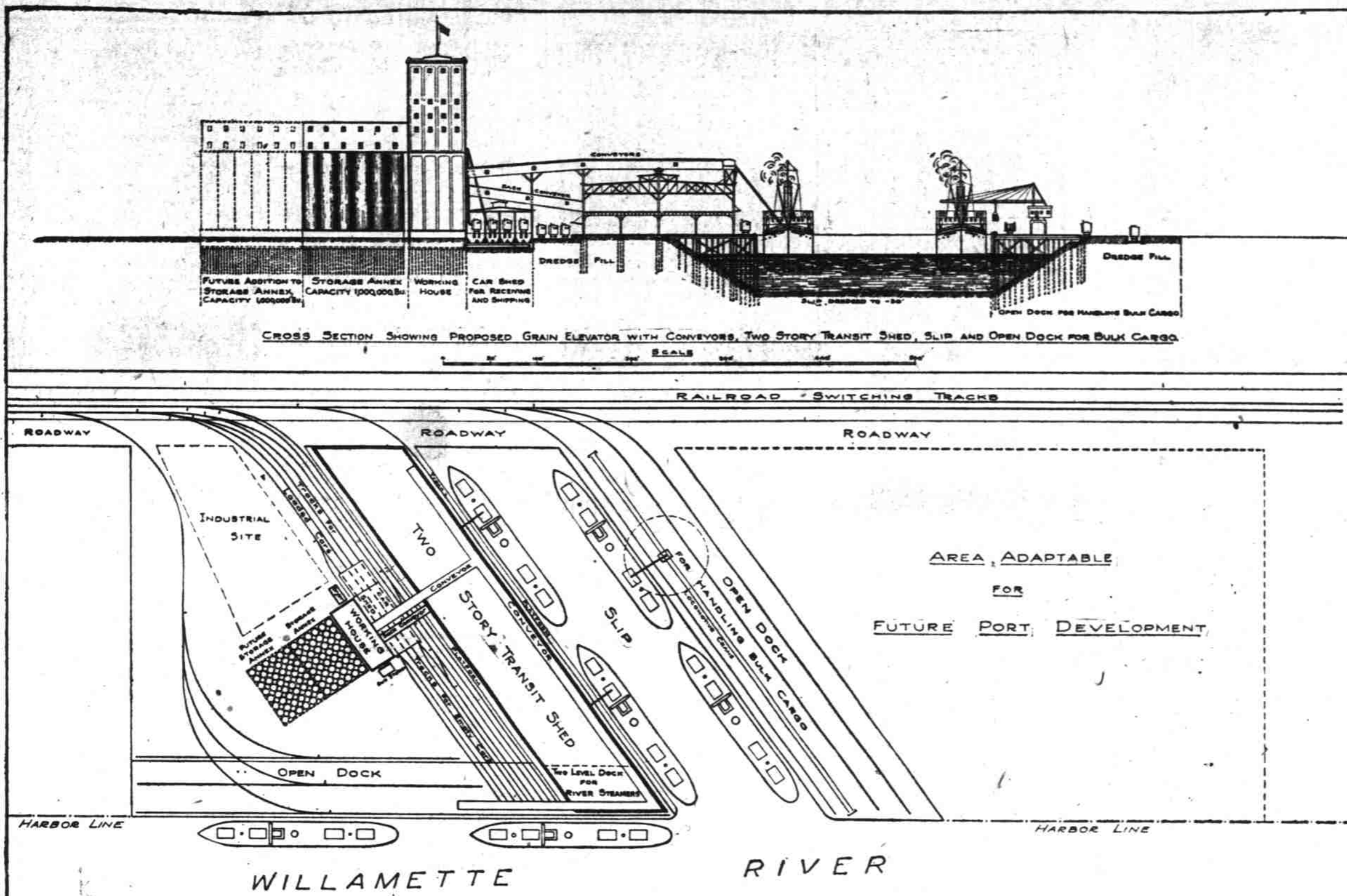
Terminal Idea Emphasized. The terminal elevator facilities which are proposed for this port will furnish the means for the expeditious and economical handling of grain in bulk, and it also provides in a limited way, and in connection therewith, certain facilities for the handling and storing of lumber, steel rails, structural steel, soy bean press and other bulk material and freight, for which there are now no convenient accommodations available—the absence of which other ports have already supplied, greatly to their advantage.

It will be noticed that the proposed terminal layout is a departure from the usual type of construction so characteristic to this port. In place of the present quay construction, which is a wharf of dock parallel with the river, pier and slip construction have been adopted. It makes possible much better connections with present rail lines and a trackage system along the face of the pier, and there is positive economy in the amount of river frontage required for the facilities which it is necessary to provide for the ships and shipping to be accommodated.

Trackage Facilities Essential. In modern dock terminal construction it is an essential requirement that trackage be provided along the front of a wharf or pier to permit of the direct transference of cargo from vessel to cars and vice versa, and in quay construction this is a much more difficult problem than in pier and slip construction, because of the greater amount of land it would be necessary to acquire to bring such trackage to the face of quay dock on anything like workable curves.

The pier and slip construction makes a more compact, and, for the accommodation of ships, more efficient terminal than quay construction, and is almost universally adopted where this class of construction can be used. Referring in detail to the layout of the particular facilities, it is proposed to provide for the handling and storing

GRAIN ELEVATOR FACILITIES TERMED ESSENTIAL TO PORT EXPANSION



Plan of proposed public grain elevator terminal for Portland as submitted by commission of public docks, with request for vote of \$3,000,000 by voters in June, with which to finance enterprise needed to recover Portland leadership as northwest grain terminal.

grain in bulk and such other articles of commerce as are outlined above, the tentative plan herewith shows the elevator with necessary trackage in rear, a two-story dock shed or warehouse along a slip of ample width and across the slip an open dock.

Storage Capacity 2,000,000 Bushels. "The elevator is of a capacity of 1,000,000 bushels, as a first unit, with space and connections arranged to increase the storage capacity to 2,000,000 bushels, should the necessity for such increase later arise. The elevator will be a combined bulk and sack elevator, which is in keeping with the best practice found advisable at other ports, and enables grain to be shipped by either method as requirements may demand. It will be a modern, fireproof, reinforced concrete structure, the workhouse to contain the elevator legs, automatic scales, separators, smutters, automatic sackers and other machinery.

"The elevator is not to be stored or shipped in bulk there will be provided automatic sackers. The sacked grain is carried by a suitable flat belt conveyor to the second story of the dock shed or warehouse, and there stored ready for shipment. Grain which may be received in sacks and in bulk in elevator will be handled on the lower floor of the dock shed.

"The elevator equipment, of course, will be modern in every respect, and will be electrically driven and controlled. "The two-story dock shed or warehouse, in addition to the uses already mentioned, will also serve the purpose of taking care of some inbound cargo or cargo to be assembled there in case of congestion at the other municipal wharves, doing away with extra harbor moves of vessels, which are strongly objected to by shipping interests of the larger class of vessels coming to this port. This feature will be of distinct advantage to the port.

"In the pier and slip construction proposed it is necessary to give the slip a considerable angle downstream to facilitate the convenient docking of vessels, and this, with the position of the elevator, as shown, furnishes a considerable area of filled ground, which can be used to good advantage for some special industry and for open storage of raw material, the handling and storage of lumber, rails, structural steel and other heavy bulk freight.

Slip of Ample Width. "The slip will be of ample width, not only to accommodate the berthed vessel, but also permit of coal and other barges to tie up alongside vessels moored on both sides of the slip. The slip will be dredged to a depth of 30 feet, or more, at low water.

"Across the slip it will be necessary to provide some sort of permanent construction to allow for the safe and convenient entrance of vessels, particularly when there is a current in the river, and it is proposed to construct there an open pier or dock, with adequate rail and crane trackage to furnish efficient handling and loading facilities, with the view of giving best possible dispatch to vessels taking on or discharging cargoes of special commodities.

"It is proposed to make the slip 500 to 1000 feet long, depending on the depth of the property which may be acquired for the intended terminal, so that two vessels may be berthed at one time on either side of the slip, thus providing the greatest possible dockage space, and also the possibility of vessels having to go into the stream to make room for other vessels immediately upon completion of loading. This arrangement permits vessels to dock awaiting cargo, particularly wheat. It keeps such vessels out of the channels, where anchorage space at the present time is extremely limited, and in case of increased shipping prevents the blocking of the channel by vessels at anchor.

Future Enlargement Planned. "This proposed terminal layout has been carefully planned for possible future enlargement and the furnishing of additional and greatly increased dockage and cargo handling facilities at a comparatively small cost, as compared with new and separate port development whenever the shipping of the port demands such an extension.

"The furnishing of additional covered storage space for the accommodation of general cargo movements may be readily effected in a very short time by the construction of a transit shed, either on the open dock across the slip, or on that portion of the open dock lying along the harbor line back of the two-story shed, as the sub-structure in either case will already be in place, the

From the trackage provided the grain is unloaded by power-driven unloaders into car pits below the level of the track. Equipment will be provided for unloading four cars at a time. "The storage annex consists of 48 bins, 16 feet in diameter and about 33 feet high and 33 interspace bins between the circular bins and having the same height. In shipping in bulk the grain is carried by belt conveyors in galleries to the face of the two-story shed and there spouted aboard a vessel. The capacity each belt conveyor provided is about 10,000 bushels per hour.

Automatic Sackers Feature. "For grain which is not to be stored or shipped in bulk there will be provided automatic sackers. The sacked grain is carried by a suitable flat belt conveyor to the second story of the dock shed or warehouse, and there stored ready for shipment. Grain which may be received in sacks and in bulk in elevator will be handled on the lower floor of the dock shed.

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DEAD AVIATOR'S HEIRS CLAIM HIS WERE BASIC AEROPLANE PATENTS

Will Seek to Have Government Pay \$1,000,000 for Montgomery's Plans.

San Francisco, March 24.—(U. P.)—Heirs of Professor John J. Montgomery, who was killed at San Jose in 1911 while making experimental airplane flights, announced they have retained an attorney to appear before the aeronautical investigating board at Washington, in an attempt to establish Montgomery's aeroplane patents as the basic patents covering heavier than air machines.

Congress has appropriated \$1,000,000 to purchase the basic patents, and the Montgomery heirs claim that the patents belonging to the Montgomery estate are the ones which congress must purchase with that fund. The Wright brothers are the other claimants of the basic patents. Wright patents differing from the Montgomery in providing for flat planes, while the Montgomery planes are built on a principle of curvature.

If the Montgomery claim is successful, the attorneys declare they will bring for an accounting on all royalties which have been collected by the Wrights. Art Smith, aviator, declares all successful modern aeroplanes follow the Montgomery principle.

construction of which requires the greater time and constitutes the largest expense of a terminal, and no additional dredging will be necessary to permit vessels reaching the docks, as this is taken care of in the proposed terminal layout.

Must Meet Any Demand. "While it is possible for the commission of public docks to anticipate such additional facilities as may be necessary to care for the handling of any special commodities and cargoes not particularly covered by the terminal layout herein described, and thereby enable this port to provide, on short notice, such facilities as competing ports have already supplied or are in a position to provide upon demand, under present authority and with means at their disposal.

Bond Issue Essential. "This would seem an absolute necessity, for either the port must be prepared to accept and handle all business offered when normal and increased shipping of the port is restored, or face the necessity of losing it. It is believed that the proposed terminal, outlined would meet with the approval of the people of the city of Portland. There is no middle course.

The proposed bond issue would accomplish this. "The terminal layout shown on the accompanying plan is applicable to several possible sites on the harbor, so that the commission of public docks is not under the necessity of acquiring any particular site in case the people authorize the proposed bond issue of \$3,000,000.

Daring Outfits To Be Barred at Bathing Resorts

Chicago, March 24.—(I. N. S.)—The city of Chicago will tell bathing girls just what to wear and what not to wear on beaches this season, if an ordinance presented to a council committee is made law. The draft was framed after a delegation of club women protested against daring outfits worn by some of the beach nymphs of 1916. Girls who violate the ordinance will be fined from \$5 to \$25. "White and flesh colored suits will be absolutely barred. The chest must not be exposed below a line drawn from armpit to armpit. Bloomers must cover the swimmer to at least four inches above the knee. The liberalists of certain clubs provided the arm holes are close fitting and there is a skirt effect. The proposed ordinance has the O. K. of the park superintendent.

City Is Threatened By Petticoat Rule

Evanston, Ill., March 24.—(U. P.)—Wary of having more men mayors and councilmen who spend their waking hours working in Chicago and let municipal affairs in this exclusive suburb go hang, the women of Evanston have drafted a system of petticoat politics and plan to elect woman-manned city administration this spring.

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EASTER WAR RELIEF APPEAL IS SENT OUT BY FEDERAL COUNCIL

Channels of Distribution Said to Be Open; American Contribution Small So Far.

The sixth war relief message of the Federal Council of the Churches and Christ in America, called "An Easter Message," quotes Herbert C. Hoover as saying that "America is only beginning to allow the awful burden of suffering and destitution to rest upon her conscience."

Swindler Confesses He Was Swindled

Los Angeles, March 24.—(P. N. S.)—Ansel Boyette who has confessed to stealing \$25,000 from the Bank one day, where he worked as head bookkeeper, was himself swindled out of \$6000 when he purchased a large quantity of molasses, which he believed to be pure and later found it to be only molasses, he told the police today. Boyette said he was anxious to return the amount of his defalcations to the bank and determined to sell the drug for the big profit in it.

England Has Eye on Internal Waterways

London, March 24.—Inland waterway advocates in the United States will be interested in the promised revival of that means of transportation in this country. It was brought about here by the action of the government in announcing its intention of taking control of "such of the non-railway owned canals as are required for essential control of the railway-owned canals."

FRENCH PILOT SAVES LIVES OF TROOPS BY DESTROYING A U-BOAT

Maneuvered Transport So as to Get Submarine Under Stern and Crushed It.

TORPEDO FIRED MISSED

Commander of Submersible, Watching Convoys Torpedo Boats, Failed to Look Out for Big Boat.

Paris, March 24.—(U. P.)—The novel destruction of a German submarine through the quick wit of an unnamed French pilot is one of the war tales of the sea which will live for years to come. To this pilot's credit today is the saving of perhaps hundreds of lives.

At the bottom of the British channel lies the battered shell of a German U-boat which, previous to its demise, had been notorious for its deadly work among craft of all kinds that happened to cross its path. To save the work of this steel shark of the sea and its habitual rendezvous is better left unsaid, but the topic of interest is that it came to its end in a most unexpected manner.

Braved Torpedo Boats. A great transport vessel loaded with British soldiers was the intended victim of the submarine. Despite torpedo boats conveying the transport, the U-boat audaciously appeared close to the French coast and shot its torpedo. A few minutes before a French pilot had boarded the ship to take her safely into the shallow channels which led to the harbor.

This pilot held the wheel when the submarine poked her periscope above the choppy waves. He saw the torpedo come plowing toward the ship. A piece of clever maneuvering caused the half his ship safely into harbor.

Minnesota Town Is Partly Under Water

La Crosse, Wis., March 24.—(I. N. S.)—With the streets of the village filled with water to a depth of five feet and the flood entering first floors of homes, dozens of families in Houston, Minn., are moving household effects into second stories today. Boats are the only means of communication in the village. All business has been suspended. Guests were forced to leave two hotels. The southern Minnesota division of the Milwaukee railway is under water for 30 miles between Rushford and Hokah. The Root river flood is the highest for many years. All valley farmers have moved their stock to higher ground.

ton of explosives to rush past the transport, missing her by a narrow margin. The khaki crowd aboard watched the show with silent interest. Their lives were in the hands of the Frenchman up on the bridge. Not a sound came from anyone. The only noise was that of the big craft veering sideways to miss the torpedo and the swish of the latter as it passed.

Didn't Watch the Transport. The torpedo boats began to get into action. They could not fire for fear of hitting their convoy, but they rushed in circles in an effort to train their guns on the enemy. The latter, however, was also constantly maneuvering. The submarine commander was watching the destroyers and paying no attention to the big unwieldy transport which seemed to be wallowing in the trough of the waves.

The French pilot's part in the drama, though, was not so unimportant as the submarine commander thought. By pulling of bell ropes and pressing of buttons the pilot soon had his ship under control. He veered her about so sharply that the submarine was quickly entrapped under the transport's stern and its great guns.

Every mortal aboard heard the grinding and ripping of steel plates as the pilot's swiftly revolving propeller ate its way into the U-boat's vitals. A rumbling sound and great patches of blue oil on the surface of the water were soon the only evidences of the submarine. Then the pilot calmly signaled for full speed ahead and took his ship safely into harbor.



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Oregon State Conclave BROTHERHOOD OF AMERICAN YEOMEN

Tuesday, April 3, 10 a. m. East Side Woodman's Hall, corner East Sixth and Alder Streets Delegates Headquarters Imperial Hotel Class Adoption Monday Night 8 P. M., April 2, will be held at the above hall. For full particulars regarding conclave, address W. A. Bullock, State Foreman, 430 Worcester Bldg., or Soren Sorenson, State Correspondent, Amity Oregon, Main 1940.



SOREN SORENSON State Correspondent

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