

PLANS OF PLUNGER

DETAILS OF THE SUBMARINE BOAT FAVORED BY OFFICIALS OF THE NAVY

WAITING SERVICE TRIALS

In the Meantime the United States Will Not Commit Itself to Any Type of Submarine Fighting Craft—Boats of Several Kinds Tested by the French Admiralty With but Indifferent Results.

WASHINGTON, D. C., Jan. 28.—(Special.)—An expert on naval affairs has been asked for publication a very interesting article regarding the details of the submarine boat to be constructed by this government to protect our interests on the high seas. He states that the decision of the naval board of bureau chiefs in opposing the purchase of the submarine boat Holland and in recommending that no craft of this class be built until the Plunger has been tested, will do doubt be regarded as a severe blow to the development of this type of boat here, where more attention has been given to this class of vessels than in any other country.

The submarine boat first received the attention of naval officials ten years ago, but since a contract was awarded for the building of a type boat at Baltimore there seems to have been no further interest manifested by the experts in the subject, and, meanwhile, France has gone ahead rapidly in the experimental work with this class of vessels. The latest reports from that country show that the flotilla of these boats will do doubt present as great variety of types as the battleships, and recent tests with the Gustave Zede have proved the practicability of the submarine boat, and in the hope of still further improving on her the naval authorities are now giving attention to the somewhat despised cutter boat.

This vessel has shown a tendency in late tests to dive to the bottom and remain there, and the authorities are now beginning to predict that still another type, known as the Morse boat, is a superior type of craft. Recent trials with her showed that as regards range of action, she had scarcely any advantage over the Zede, and it had to be predicted that she would not be used for any other purpose than harbor defense. After all these experiments, however, it did not seem much headway had been made, but the French navy department, with praiseworthy optimism, conveyed its favors to the Narval, simply, it is claimed, because nothing is known of her type, and plenty of copies were consequently made for the exercise of vivid imagination.

This vessel is constructed of steel and has a displacement of 150 tons. The motive power is supplied by an oil engine, and the only means of propulsion is the boat's crew navigating at the surface or with only her lookout and her chimney exposed, but also operates a dynamo for charging batteries and for other purposes, these being used to propel the boat when she is entirely submerged and the chimney unshipped.

Sailing on the surface at twelve knots, the Narval promises a range of action of 25 miles, and at eight knots the range is 65 miles. While submerged the accumulators are expected to propel the boat twenty-five miles at eight knots, and twenty miles at six knots. She is equipped with four torpedo tubes and carries two officers and nine men. This boat is believed to be the best type yet developed in any country.

BUT ONE TYPE. There may be said to be but one distinct type of the submarine boat in this country, represented by the Holland, now at Washington, and the Plunger, building for the navy at Baltimore. This is because the only other type of submarine boat, the Morse boat, the most important of which was the maintenance of life and management of the craft beneath the surface of the sea. When the boat is submerged, the water is drawn into the hull, and the air is drawn into the blower and the air shaft provide abundant ventilation. When submerged, air is constantly allowed to escape from the hull, and the blower is stopped, and the boat is slightly above atmospheric pressure. Vented air from near the bottom is forced outward by a small pump driven by an electric motor. Lighting on the surface is provided through the companionways and by eight four-inch dead lights. If not deeply submerged, and in clear water, light will still be admitted through the stern light, and, wherever required, incandescent lights, supplied by the storage batteries, can be employed.

The method of operating the vessel is also interesting. When the vessel is on the surface of the water, with the smokestack and the airshaft erected, and running ahead full speed, and air is drawn into the surface of the water, two large compartments in the water are opened and the air contained in these spaces allowed to escape through valves provided at their upper ends. The blower is stopped, and the furnace and ashpit doors are closed airtight, the smokestacks are shipped, the cover of the aperture through which they pass is closed, and the furnace is dropped into its place and clamped tightly. By this time the vessel will be nearly awash. While reaching the wash position the blower is in the direction in which it is necessary to steer, steam power being still employed until the steam pressure in the boiler is run off.

UNDER WATER. As soon as the horizontal position at the proper depth is attained an automatic apparatus prevents further consideration, by the failure of any part of this apparatus, the vessel should run to a greater depth than is desired, say beyond forty feet deep, the lower end of the

POPULAR WANTS

HELP WANTED—MALES.

A BRIGHT, up-to-date man, to travel nearby towns; good salary and commission. Address: J. H. Woodward, Baltimore.

A MAN that can milk and drive horses can get steady job on dairy farm. C. H. Globe.

BOY—Bright, intelligent boy, about sixteen years of age, willing to learn the drapery business. Call at 22 East Sixth st.

BOY WANTED—Call at cigar box factory in rear of 244 Thirtieth st.

BOY—M. F. Patterson Dental Dept. 71 to 75 East Seventh st., up stairs.

CLEAN boy, refreshing bath, free laundry for 18; healthy food at 1 penny per dish and upward. Helping Hand Mission, 145 East Third st.

FIFTEEN men to distribute circulars. Apply to foreman at sidewalk, corner East Sixth and Jackson sts., Monday, 7:45 a. m.

GOVERNMENT positions. Don't prepare for any civil service or census examining without seeing our catalogue of information. Sent free. Columbian Correspondence College, Washington, D. C.

LIVE, ENERGETIC MEN to solicit membership for mantle agency; good pay to right parties. Address Room 502, Northern Office Building, Chicago, Ill.

MAN wanted at 211 West Seventh st.

SALESMAN—Wanted, a first-class salesman to handle a line of curtains and draperies. Apply Conroy & Croty, 27 East Seventh st. Bring references.

WANTED—Lady or gentleman to represent a new and profitable agency; musical knowledge not necessary, but access to piano or organ. W. Scott Grove, Scranton, Pa.

WANTED—Young men to join the special permanent advertising agency; moving or lying still, the camera lucida placed between the projections on the turret and slightly to one side may be raised to the height of four feet. Headache Capsules. They remove the cause, as well as stop the pain.

WANTED—First-class specialty salesman to represent our house in the Western and Southern States. Permanent position to right party; bond required. Box 998, St. Paul, Minn.

WANTED—Coffee salesman for Wisconsin and Northwest. Address A. E. C., 24 River st., Chicago.

WE ARE prepared to privately teach mainly practical advertisement writing; good salaries; big demand; send for prospectus. The Page Davis Co., Medina Temple, Chicago.

AIR UNDER PRESSURE.

Thirty cubic feet of air, at a pressure of 2,000 pounds per square inch, are carried in the air reservoirs. This volume of air is more than sufficient to submerge the boat during six hours' submergence—the usual maximum time of a submerged run—leaving an abundant reserve for operating the hydraulic cylinders at the top of the turret, and also for any chance the supply of air should run out, for instance, there was no opportunity of storing air while the vessel was on the surface, submerged or lying on the bottom in water less than fifty feet deep by allowing a float carrying a two-inch hose pipe on a reel to be lowered to the surface of the water, and the superstructure to rise to the surface of the water carrying the hose pipe with it and holding its open end above the surface. The compressed air, under pressure, is driven by a small dynamo compressor, driven by the small dynamo and a sufficient quantity of air for several hours' use stored in a few minutes. The compressed air is drawn into the same conditions, renewing the supply of air as may be required.

The boat may be brought to the surface from submerged conditions as follows: The anchor is raised and the upward force of the reserve buoyancy permitted to bring the vessel to the surface. If the vessel happens to be running submerged, it is hoisted to the surface by the horizontal rudders. If it is necessary to perform this maneuver rapidly air pressure a few pounds greater than that of the atmosphere is exerted over the water in the ballast compartments and they will be quickly emptied.

When the vessel reaches the wash position the smokestack is lowered, and the air shaft is shipped and the fire started afresh.

During an action the dives will probably be very short, as the boat will be able to be worked only when menaced by torpedoes carried by torpedo boats, and when it is necessary to approach the vessel unobserved. Rapid-fire torpedoes are directed at the practical vulnerability of the vessel when the vessel is submerged. The bureau chiefs are by no means unfavorable to the construction of this type of craft will not be in all probability adopted by the naval service.

POPULAR WANTS

HELP WANTED—FEMALES.

GIRLS wanted for general housework. Apply in person at this office at once. Minn. Grass Twine Co., corner Front and Washington, St. Paul, Minn.

HOUSEWORK—Experienced girl for general housework in small family; good wages if capable. Apply at once. 33 Goodrich av., Chicago.

HOUSEWORK—Girl for general housework; small family; good wages; references. 87 Lincoln av.

HOUSEWORK—Wanted, at once, good girl for general housework. Rooms 40 and 42, 123 West Third st., Chicago.

HOUSEWORK—Wanted, girl for general housework; references required. Call at 552 Dayton av., immediately.

HOUSEWORK—Competent girl for general housework; no washing; references required. 234 Sherburne av.

HOUSEWORK—Wanted, girl for general housework; small family; good salary. 437 Grand av., Chicago.

HOUSEWORK—Wanted, girl to assist with housework. 339 Rondo.

LADIES—We defy all competitors, special reduction this week to all who call at the French American Dress Cutting School, 274, Milwaukee, Mich. Apprentices wanted. Fine ladies tailor.

NURSE—Wanted, a German nurse for three-year-old boy; references required. Apply 71 Central av.

STENOGRAPHER—Lady stenographer; must be a business woman and up-to-date in shorthand; willing to work in own handwriting, state salary and experience. E. H. Globe.

WANTED—Salesladies to canvass the best and quickest selling novelty for ladies; sells at sight; liberal salary and commission paid; bright salesladies can make \$100 daily. Kaplan, 4 Davidson block.

WANTED—Young women, not now profitably employed, to qualify immediately for high positions in the profession of a good salary. Address 516 Northern Office Bldg., Chicago.

WANTED LADIES TO SEW—\$3 a week plus expenses. Rep with stamp. Look Box 888, Chicago, Ill.

WIDOW, refined and accomplished (once in affluence), wants home with family and a few boarders; respectable profession; no inebriation. S. H. Globe.

WE ARE paying ladies and girls \$7 to \$12 a week working for us at their homes. Peasestry Art Manufacturing Co., 319 Phoenix.

WOMEN to do plain sewing at home; \$1.50 per day; four months' work guaranteed; stamp addressed envelope for particulars. R. W. Hutton & Co., Philadelphia, Pa.

SITUATIONS WANTED—MALES.

Anybody out of work in St. Paul or Minneapolis may insert an advertisement under this heading free of charge.

A BOY attending school would like a place to work for his board; private family preferred; willing to work, and best of references. Address J. M. Globe Business College, Telegraph Department, 43 West Seventh st., St. Paul.

AN EXPERIENCED young man would like a situation; has had several years' experience in wholesale and retail selling; good references. Address C. B., 97 Grand av., St. Paul.

A GOOD, honest young man, twenty years of age, with a good education; kind; can furnish good reference. L. H. B., 460 Goodhue st.

A YOUNG MAN who is an experienced teacher and college graduate will do private tutoring in Latin, Greek, and French. Address 123 Selby st.

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A GOOD washwoman would like washing and ironing. Address 123 Selby st., St. Paul, Minn.

A WOMAN would like work in private families; understands washing and ironing. Call at 411 East Fifth st., St. Paul, Minn.

BY A YOUNG lady of experience, a position in a dentist's office or clerical work. J. H. Globe.

CLERK—Young girl of very good education; position as clerk or office work; have taught school. H. H. B., 460 Goodhue st.

COOK—A girl who is an experienced cook and has had experience in a hotel; second girl is kept; can give good references. Call at 133 East Tenth st.

POPULAR WANTS

AGENTS AND AGENCIES.

AGENTS—Wanted, agents for "Library of the World," "The Standard," and "The Life of Moody"; credit given; freight paid; best terms guaranteed. Western Book Agency, St. Paul, Minn.

AGENTS—If you want a sure money-maker send for our calculating pencils. Sample free. Novelty Manufacturers, 236 Armour av., Chicago.

AGENTS—Sure permanent income; \$25 weekly lowest estimate; failure impossible; experience unnecessary; our free-of-charge samples. Collier & Lewis, 300 Milwaukee, Wis.

AGENTS—Work our special catchy advertising schemes (something new); \$5 per copy. Commercial Publishing Co., Detroit, Mich.

AGENTS WANTED—The wonderful calculating pencil, best selling novelty out; 10,000 sold in Chicago. Two weeks' Leader Card Co., 2638 Armour av., Chicago.

AGENTS—Biggest snap in the business; selling new legitimate line of stationery; agent made \$241 first month, another \$46; easy seller. Novelty Wire Works, 274, Milwaukee, Mich.

AGENTS—Salary or commission; \$25 daily guaranteed; no experience necessary; sample free. Brahm Mfg. Co., 130 Cincinnati, O.

AGENTS—Also Monthly Metallic Bread Baking, sample free. A. Q. Forshaw Co., Cincinnati, O.

AGENTS—Do you want something reliable to sell? Then write us for terms on our "Collar," "Cuffs," and "Fronts." Windsor Collar Co., Chicago, Ill.

LADIES and gentlemen for fraternal insurance; easy money without experience; both sexes; "Life and Accident" and "Accident and Sickness." Investigate. State Manager, Box 263, Redwood, Wis.

MADAM DEBERANCE Best Developer, sure, harmless, easy to use; no expensive vacuum appliance, genuine scientific formula for the development or restoration of the female bust, neck and form. Free trial guaranteed. Address Deures Medicine, 123 Selby st., St. Paul.

MAGNETIC healers make big money; famous Welter method by mail \$10. Journal free. Address the Southern School of Magnetic Healing, 123 Selby st., St. Paul.

MAGNETIC healing, personal magnetism and hypnotism. Books free for stamp. Beauty, power, health and wealth for all. Address 123 Selby st., St. Paul.

MANTLELESS gas burners. Mantleless gasolene lamps dependable. Mantleless gasolene lamps. Morey, patented. Lagrange, Ill.

WANTED—Agents, canvassers, salesmen, new dealers send for sample and particulars. The Diamond Parlor, most attractive 250 proposition ever offered. City country. Exclusive territory. The Advisory Co., 123 Selby st., St. Paul.

WANTED—A woman with a little capital to open a business and conduct a profitable home mail business; splendid opportunity to make money. The Olive Branch Co., South Bend, Ind.

FINANCIAL.

LOANS TO SALARIED PEOPLE—If you are a salaried employee holding a permanent position we will loan you the amount of your salary without interest. WITHOUT MORTGAGE, ENDORSER OR SECURITY OF ANY KIND OTHER THAN YOUR NAME. You may repay in small weekly or monthly payments. All applications treated confidentially. Call and see us and you will receive as courteous treatment as your employer. Des Moines, Iowa. Financial Co., Room 200, New York City Bldg.

MONEY loaned salaried people holding permanent positions with reliable employers. Loans made on house, furniture, pianos, etc., without removal from residence of owner. Call for terms and plan of loaning before closing a check. Loans made on weekly, semi-monthly or monthly suit. Lower. All inquiries and business confidential. Address 123 Selby st., St. Paul.

M—\$10, \$20, \$30, \$40, \$50, \$100 TO LOAN on furniture, pianos, household goods, etc., without removal. Loans can be paid in installments, reducing cost accordingly. Promptness, privacy and lowest rates. Guaranty Building, 123 Selby st., St. Paul.

DO YOU want to borrow money on your diamonds, watch or time check? Any amount diamonds and watches for sale. Loans exclusively on insurance policies; correspondence solicited.

MONEY LOANED on life policies; or bought. L. E. Van Norman, Guaranty Building, 123 Selby st., St. Paul.

SHORT LOANS on personal property, payable in monthly installments; lowest rates; business confidential. 730 Globe.

POPULAR WANTS

ROOMS FOR RENT.

ROOMS—At Hotel Fox, corner Cedar and Seventh, furnished rooms for the day or week; steam heat and bath; transient trade solicited.

COLLEGE AV. 73—Comfortable front alcove room, suitable for one or two gentlemen; furnace heat, gas and bath; references.

NINTH AND SMITH AV. 21 BUCKINGHAM—For rent, furnished room, steam heat, gas, bath; \$3 per month; gentleman only.

SELBY AV. 232—A large, pleasant, sunny room with large alcove, furnished, gas, bath, heat, etc.

SMALL furnished room, steam heat, bath and gas; walking distance of post-office. C. H. Globe.

SMITH AV. 70—Corner College—For rent, furnished room, or room and board, for two, in private family.

SPRUCE ST. 215—Two furnished rooms for light housekeeping.

SEVENTH ST. 88 WEST—Two front rooms, fully furnished, steam heat and sitting room, heated, on first floor.

TWO GENTLEMEN to room with a third in five-room and bath furnished alcove room, suitable for one or two. Monday afternoon, at 2 o'clock, 68 Buckingham.

TILTON ST. 48—For rent, furnished front room, south-facing; bath and board, private family.

THIRD ST. 145 EAST—Lodging and board, with bath, \$2.50 per week.

BUSINESS CHANCES.

CHANCE OF A LIFETIME—Receipts for manufacturing thousands of favoring extracts, 25 cents. Home Supply Co., 151 East Seventh st., St. Paul, Minn.

FOR SALE—To trade for good farm, hotel or city property, a large, modern, well equipped and furnished house, with electric elevator, pasture. Very cheap. Address 123 Selby st., St. Paul.

FOR SALE—Two-chair barber shop for sale; doing good business; none better for sale. For particulars, address 123 Selby st., Webster, Andover, S. D.

GOOD office man to invest \$2,500 in manufacturing and wholesale business established. To take full charge of office and salesmen. Also good, reliable salesman to invest \$2,500 in business, who has an established trade and is willing to work. O. T. H. Globe.

I WANT to trade for stock of general merchandise, hardware or jewelry; no agents here; only Louis J. Wilde, General Delivery, St. Paul, Minn.

SPECULATION—Twenty dollars margins one thousand grain two cents; send for our book "Speculation" free. J. K. Constock & Co., 23 Traders' Bldg., Chicago.

\$100 FOR \$10—Invest \$10 to \$100 in stocks and get \$1,000 for \$100; safe as a bank. Wm. Reed, 137 S. 5th St., Phil.

REAL ESTATE.

FREE LOTS—To advertise Sunset, Cal. For more particulars, send for prospectus. Orient Land Co., 123 Selby st., Los Angeles, Cal.

GREAT BARGAINS in real estate, for sale or to exchange. Eisenberg, 518 Rice st.

HOUSE AND LOT on paved street, four blocks from postoffice, \$2,800; also ten-room brick house, three blocks from Seventh st. and Broadway, \$2,400. J. C. Beattie, 45 Court Block.

POPULAR WANTS

WANTED TO BUY.

RESIDENCE WANTED—Have customer for a fine residence; must be modern in appointments; price from \$10,000 to \$15,000; limit, \$50,000; give full particulars in letter. V. C. Gilman, N. Y. Life Bldg.

TRAVELERS' GUIDE.

Trains leave and arrive at St. Paul as follows:

CHICAGO GREAT WESTERN RR.

"The Maple Leaf Route." City Ticket Office, 5th & Robert Sts., St. Paul. Leave for Chicago, Ill., 8:10 am, 12:15 pm, 6:30 pm. Arrive Chicago, Ill., 11:30 am, 5:30 pm, 11:30 pm.

Chicago, Milwaukee & St. Paul Ry.

Ticket Office 365 Robert St., Phone 99. (a) Daily, b) Ex. Sun., c) Leave, d) Arrive.

Chicago "Day" Express, 8:30 am, 10:15 am, 11:30 am, 12:15 pm, 6:30 pm, 11:30 pm. Arrive Chicago, Ill., 11:30 am, 5:30 pm, 11:30 pm.

Chicago "Pioneer Limited," 8:15 am, 11:30 am, 12:15 pm, 6:30 pm, 11:30 pm. Arrive Chicago, Ill., 11:30 am, 5:30 pm, 11:30 pm.

Chicago "Night Special," 11:30 pm. Arrive Chicago, Ill., 11:30 pm.

Chicago "Northwestern," 8:15 am, 11:30 am, 12:15 pm, 6:30 pm, 11:30 pm. Arrive Chicago, Ill., 11:30 am, 5:30 pm, 11:30 pm.

TICKET OFFICE

5th & Robert Sts. Milwaukee Station, Minneapolis Dining and Pullman Sleeping Cars on all trains.

Paul & Duluth, Fargo, Jamestown, Levee Arrive 8:00 am, 11:30 am, 12:15 pm, 6:30 pm, 11:30 pm. Depart 8:15 am, 11:30 am, 12:15 pm, 6:30 pm, 11:30 pm.

THE GREAT NORTHERN

Ticket Office—249 East Third St., Phone G. N. 14. Leave, a) Daily, b) Ex. Sun., c) Leave, d) Arrive.

8:30 am, 11:30 am, 12:15 pm, 6:30 pm, 11:30 pm. Arrive 8:15 am, 11:30 am, 12:15 pm, 6:30 pm, 11:30 pm.

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8:00 pm, 11:30 pm. Arrive 8:15 am, 11:30 am, 12:15 pm, 6:30 pm, 11:30 pm.

"NORTH-WESTERN LINE."

Office 395 Robert St., Phone 493. Leave in Daily, b) Ex. Sunday, c) Arrive.

8:30 am, 11:30 am, 12:15 pm, 6:30 pm, 11:30 pm. Arrive 8:15 am, 11:30 am, 12:15 pm, 6:30 pm, 11:30 pm.

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