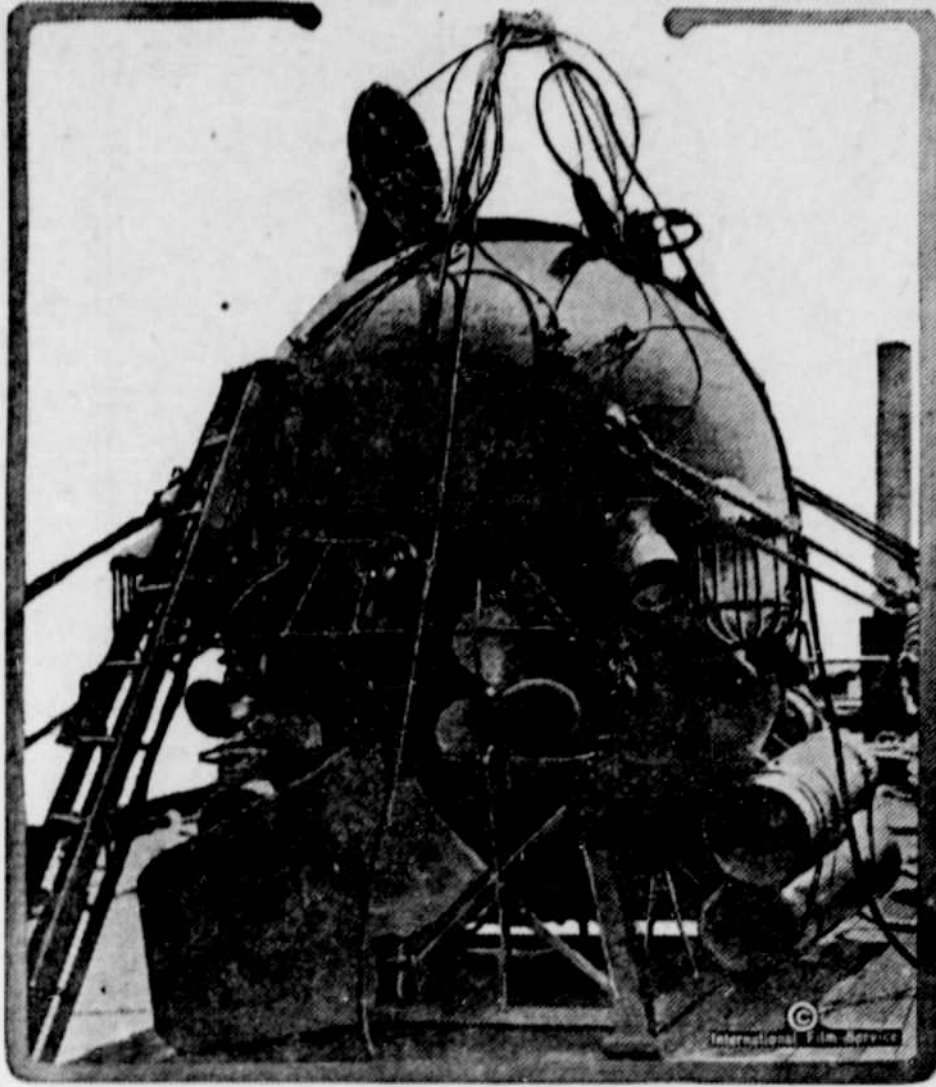


Diving Bell to Raise Treasures of the Deep

Wonderful Submarine Is the Invention of W. D. Sisson, an American Engineer



Millions and possibly billions of dollars worth of treasures now lying on the ocean floor in sunken ships may be regained to the world by the "cannon ball." The great diving bell has just been completed and is now being tested. It resembles a cannon ball, a giant sphere, eight feet in diameter. The shell is made of tough vanadium steel, one and one-fourth inches in thickness and weighs, with the machinery inside, six tons. The submarine works by maneuvering huge steel pontoons alongside a sunken ship, bolting the pontoons to the vessel and thus releasing the mechanism which pumps the pontoons free of water and raises the sunken ship. The largest pontoons are 40 feet long and 15 feet in diameter, and have a lifting power of 300 tons each.

Two operators form the crew of the diving bell and they work in normal atmospheric conditions because of an oxygen tank on top of the sphere. The air supply will last for 72 hours without being replenished. The supporting cable and all electrical and telephone wires are carried in an insulated cable, which is strong enough to support 56 tons.

Two propellers and a rudder give the ball lateral movement and two propellers send it up and down. These propellers push the ball through the water at two miles per hour.

In front of the ball are four 3,000 candle power nitrogen lamps, covered with a steel net, and a two-inch glass, to light up the hulls of the sunken ships. Near each light is a lookout lens four inches in thickness. On the front are huge magnets, which draw the ball to the hull of the sunken vessel.

Business Before Pleasure

Never before did so many Americans spend so much money in Europe, or for such a good purpose. Silence is usually the best asset of a good-looking woman. Wonder if the cannibals were informed of the dates of meatless days. It is always hazardous for an unattractive woman to shoot her husband. The man who eats garlic can always attract attention if not fame.

Beef for Soldiers' Use Is Under Official Observation From the Pens to Mess Tins

Every precaution to prevent an "embalmed beef" scandal in this war is being taken by the war department, it is announced at Washington.

At present the army consumes about 2,000,000 pounds of fresh beef daily—that is to say about 4,000 head of cattle. And it is under inspection from the time the live stock goes to the slaughter house until it reaches the mess tins of the individual soldiers. It is left to the men themselves to see that nothing happens while the meat is en route from the mess tins to their mouths.

Beginning with the beeves on the hoof, an examination is made for physical defects and all questionable animals are rejected. Then the carcasses are gone over, and only those "sound, healthful and wholesome" are passed.

Fresh meats marked "Inspected and Passed" go forward to the camps in regular shipments, but meats cured, canned or manufactured into sausages, etc., are re-inspected at each step of the process.

Fresh meats arriving at the camps are again twice re-inspected, first by an inspector of the bureau of animal industry, and second by an officer of the quartermaster corps. And after that there is a final inspection by the organization commander who draws the ration for immediate use. After that the company cooks have their chance—to make the food palatable.

Why the Temperature Is Not Hotter Nearer the Sun Is Made Plain by Scientific Men

Why is the air generally much colder a mile above the earth than near the ground? The heat of the atmosphere comes from the sun, but by a somewhat indirect process. The incoming sunbeams are only slightly absorbed by the dry air at high levels, and so have little effect on its atmosphere. In the lower regions of the atmosphere there is always a considerable amount of water vapor (water in the form of gas), and this substance has a relatively large capacity for absorbing heat from sunshine. Lastly, the earth absorbs all the heat that falls upon it, and then gives it back, by radiation or conduction, to the air above it. Thus the atmosphere is mainly heated from below and not from above. Air heated near the ground tends to rise, but it cools rapidly in rising. As it reaches higher levels the pressure upon it is less; it expands, pushing away the surrounding air, and it uses up in this work some of the energy that it originally possessed in the form of heat. This process is referred to by scientists as "adiabatic cooling." This explains why the heat of summer often seems to come up from the ground, rather than from the boiling sun above. —Popular Science Monthly.

KEEP POULTRY IN BACK YARD

The department of agriculture has a campaign in full swing for the establishment of small flocks of poultry in back yards of city or suburban dwellings. In every household, no matter how economical the housewife, there is a certain amount of table scraps and kitchen waste which has feeding value, but which, if not fed, finds its way into the garbage pail. Poultry is the only class of domestic animals which is suitable for converting this waste material, right where it is produced in the city, into wholesome and nutritious food in the form of eggs and poultry meat. Though the value of the product from each city flock is small of itself the aggregate is large. A small flock of hens, even as few as six or eight,

should produce eggs enough, where used economically, for a family of four or five persons throughout the entire year, except during the molting period of the fall and early winter. By the preservation of surplus eggs produced during the spring and early summer this period of scarcity can be provided for. The keeping of pullets instead of hens also will insure the production of eggs. Not only will the eggs from the home flock materially reduce the cost of living, but the superior freshness and quality of the eggs are in themselves well worth the effort expended. Eggs are a highly nutritious food and are so widely used as to be almost indispensable, and an occasional chicken dinner is relished by everyone.

Where conditions render it feasible and cheap small flocks of poultry should be kept to a greater extent than at present by families in villages and towns and especially in the suburbs of large cities. The need for this extension of poultry raising is particularly great in those sections where the consumption of poultry products exceeds the production, with the result that prices are high.

Home-Grown Sweet Corn Is Best—Good Advice on How To Grow Your Roasting Ears

To have sweet corn at its best, says the U. S. department of agriculture, it should be on the fire within 15 minutes after being pulled from the stalk. It loses quality very rapidly after being picked because its sugar changes into starch. This is a fine argument for having this crop in the home garden, if space will allow. Those who wish to grow their own roasting ears will find the following advice useful:

Corn does best in a fertile soil, but is able to adapt itself to all textures from sand to clay. To grow it in sufficient quantities for the average family requires more space, however, than for most garden vegetables. It should not be planted until after danger of frost is past.

The rows should be spaced not closer than three feet apart, and for the larger-growing late varieties the distance had best be three and one-half feet. Stalks should be thinned to stand from 15 to 18 inches in the row. In planting, the seed is covered with one or two inches of soil. Cultivation must be thorough, frequent, and shallow.

It is possible to use the ground occupied by early corn for a fall planting of such crops as spinach, turnips, and kale. Large, late varieties of corn, however, will occupy the ground for practically the whole season.

JUST FOR FUN

Reasonable Suspicion.
"It must be a lot of satisfaction for a woman of fashion to have a French maid."
"No doubt. Still there are drawbacks."
"Of what kind?"
"If the maid happens to be chic, it isn't long before her mistress is wondering what sort of effect Marie is having on friend husband."

Very Much Tried
Bacon — Were you ever tried by a jury?
Egbert — Oh, yes; I served on one — once, and none of the stubborn men would agree with me!

What Detained Him.
"You seem to be later every morning," said the manager.
"Yes," replied the meek-looking man; "my wife seems to add a few more buttons to the back of her waist every day."

Not for That Reason.
The electrical expert was breaking in a green man.
"Never touch the wires with your bare hands."
"I see. Everything sanitary."

Charm of the Impromptu.
"What's your mule's name?"
"He hasn't got any regular name. It sort o' keeps us both interested for me to think up what to call 'im as the provocation arises."

A Good Speech.
"Did he make a good speech?"
"Great. In the first place he said something, and in the second place he quit after he had said it."

Pessimism.
Curious Friend—I wonder why they say poetry has feet?
Impecunious Poet—Well, not because it wins in a walk.

CONSERVE SUGAR, IS APPEAL

Food Administration Asks Consumers Not to Hoard.

"You are entitled to an extra amount of sugar these days for home canning. Do not permit this privilege to tempt you to do a wrong to your neighbor and your country."

This is the message from the National Food Administration to American housewives in a bulletin received by Northwest Federal Food administrators. The bulletin continues:

"Don't hoard sugar. Buy it just as you need it and keep your canning sugar separate from your table supply. Cut down on your table and cooking sugar in order that all housewives may have sufficient for canning and preserving the foods that would otherwise spoil. Sales of sugar for canning purposes are limited to 25 pounds at a time for the present. Because of a lack of ships, sugar is coming into the country slowly and it must be distributed accordingly if all are to be supplied."

Some terse paragraphs regarding conservation of food are found in Food Administration bulletins coming in from other states, among these being: "The next wheat crop will be a big one, but who knows what will be the size of the one to follow? Hoover wants to store some of the big crop against a lean year that may come. Help him, not only for yourself, but for the boys at the front and for our patient, long-suffering allies."

Big Lens Factory Burns.

Wheeling, W. Va. — Fire destroyed the property of the Superior Glass company at Martin's Ferry, Ohio, 30 miles from here, shortly after 1 o'clock Sunday morning. The loss is estimated at \$200,000. For more than a year the company has been engaged in the manufacture of searchlight lenses for the French government. Incendiarism is suspected.

NORTHWEST MARKET REPORT

Wheat — Bulk basis, Portland for No. 1 grade; Hard wheat—Bluestem, Early Bart, Allen Galgulus, Martin Amber, \$2.05. Soft white — Palouse Bluestem, Fortyfold, White Valley, Gold Coin, White Russian, \$2.03. White Club — Little Club, Jenkins' Club, White Hybrids, Sonora, \$2.01. Red Walla—Red Russian, Red Hybrids, Jones Fife, Coppei, \$1.98. No. 2 grade, 3c less; No. 3 grade, 6c less. Other grains handled by samples.

Flour—Patents, \$10; valley, \$9.60; whole wheat, \$9.60; Graham, \$9.20; barley flour, \$11 per barrel; rye flour, \$11@11.40 per barrel; corn flour, \$11.60@14.50.

Millfeed — Net millfeed prices, car lots: Bran, \$30 per ton; shorts, \$32; middlings, \$39; mixed cars and less than carloads, 50c more; rolled barley, \$74@75; rolled oats, \$69.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, \$32@33 per ton; valley timothy, \$27@28; alfalfa, \$24@24.50; valley grain hay, \$24@26; clover, \$21; straw, \$9@10.

Butter—Cubes, extra, 41¢; prime firsts, 43¢; prints, extras, 48¢; cartons, 1c extra, butter fat, No. 1, 47¢ per pound.

Eggs — Oregon ranch, current receipts, 38¢@39¢; candled, 40¢@41¢; select, 42¢ per dozen.

Poultry — Hens, 23¢@25¢; broilers, 28¢@30¢; roosters, \$16@17¢; ducks, geese and turkeys, nominal.

Veal—Fancy, 16¢ per pound. Pork—Fancy, 23¢ per pound. Fruits — Strawberries, \$2.50@3.50 per crate; cherries, 5¢@12¢ per pound; cantaloupes, \$1.50 per crate; gooseberries, 5¢@6¢ per pound; apricots, \$2.35@2.50; watermelons, 4¢@4½¢ per pound.

Vegetables—Tomatoes, \$2.25@2.50 per crate; cabbage, 2½¢@3¢ per pound; lettuce, \$2.50@3 per crate; cucumbers, \$1.25@2 per dozen; garlic, 7¢; celery, \$3 per crate; peppers, 25¢@35¢ per pound; rhubarb, 4¢ per pound; asparagus, \$2.50 per crate; spinach, 5¢@6¢ per pound; peas, 10¢@12¢ per pound; beans, 15¢ per pound.

Sack Vegetables — Carrots, \$2 per sack; turnips, \$1.85; parsnips, \$1.25; beets, \$2.25.

Potatoes — Oregon Burbanks, \$1@1.50 per hundred.

Onions — Yellow, \$1.75 per crate; crystal, \$2@2.25; red, \$1.75 per sack.

Cattle — June 20, 1918. Prime steers, \$12.00@13.00. Good to choice steers, 11.00@12.00. Medium to good steers, 9.00@10.00. Fair to medium steers, 8.00@9.00. Common to fair steers, 5.00@8.00. Choice cows and heifers, 8.50@9.00. Com. to good cows and hf, 6.00@7.50. Canners, 3.00@4.50. Bulls, 6.00@8.00. Calves, 8.50@11.50. Stockers and feeders, 7.00@9.00.

Hogs — Prime mixed, \$16.60@16.75. Medium mixed, 16.55@16.60. Rough heavies, 15.60@15.75. Pigs, 15.50@15.75. Bulk, 16.50.

Sheep — Prime spring lambs, \$14.00@14.50. Heavy lambs, 13.50@14.50. Yearlings, 7.50@8.00. Wethers, 7.00@7.50. Ewes, 5.00@7.00.

GERMANY BLAMES RUSSIA

Cause of War Laid at Door of ex-Czar — France and England Criticised.

Amsterdam. — Germany's war aims were briefly set forth, peace ideas outlined, the idea that she desired to secure world domination through the war disclaimed and the responsibility for the conflict primarily placed upon Russia by Dr. Richard von Kuehlmann, the German foreign secretary, in a speech to the reichstag in Berlin Tuesday.

While declaring that what was desired for the German people and their allies was "a free, strong, independent existence," within the boundaries drawn by them, "by history," the foreign secretary said Germany would have to decline to make any prior concessions by stating her position as to Belgium in a way which would bind her without similarly binding Germany's enemies.

After declaring that the revelations that had been made showed Russia as the power which planned and desired the war, with France abetting her, and England's attitude strengthening the Russian desire for conflict, Dr. von Kuehlmann again declared that Germany had not entertained any belief that this war could lead even to the domination of Europe and much less that of the world.

With reference to the peace question, Dr. von Kuehlmann quoted from former premier Asquith's speech of May 16, in which he said that the British government would not turn a deaf ear to a peace proposal if it was not couched in ambiguous terms.

"We likewise can make the same declaration," added the foreign secretary, "knowing it to be also our policy."

"Once the moment arrives—when, I care not to prophesy—that the nations which are at present locked in battle will exchange peace views, one of the preliminary conditions must be certain degrees of mutual confidence in each other's honesty and chivalry."

ROUTED AUSTRIANS CONTINUE RETREAT

Italians Press on East Bank of Piave River—Flood Waters Rise Again Which Aids Fleeing Foe.

The Italians have cleared the remaining Austrian rearguards from the west bank of the Piave river and are in possession of the entire river front from the Montello plateau to the sea. At last accounts their forces which crossed the stream in pursuit of the retreating Austrians were still harassing them, inflicting heavy casualties and forcing the enemy to continue his disorderly retreat.

Fate has turned somewhat its balance in favor of the Austrians, for the Piave river again has risen and some of the pontoon bridges the Italians had thrown across the stream have been carried away, making impossible a quick pursuit and the crushing of the Austrians, which General Diaz had counted upon. The Austrians are declared to be rushing in reserves from the east.

The Austrian war office admits a reverse along the Piave, but announces that the retrograde movement has been carried out in accordance with plans and without loss of material. It is added that the Austrians have taken more than 50,000 prisoners from the Italians since June 15 and that the aggregate losses of the Italians in the fighting, at the lowest estimate, is 150,000 men.

Holding the upper hand along the borders of the Venetian plain, the Italians have taken the offensive against the enemy in the mountain region and are attacking on various sectors. Notable gains of ground have been made, and in addition to heavy casualties inflicted on the enemy a large number of Austrians have been made prisoner and 16 machine guns have been captured, according to Rome. The Austrian war office, however, asserts that all attacks in this region have been repulsed.

Austrians Tired of War, Strike.

London.—A strike, which, starting in Vienna, is said to be becoming general in Austria, registers the revolt of the people against war. And the factor that has tended to make war unpopular, the food shortage, shows no tendency to improve.

Strikers in the various factories at Vienna on Saturday formulated a demand that the Austrian government show itself for a general peace and invite the governments of enemy countries to enter into peace negotiations, says a dispatch from The Hague to the Times. Representatives of the workers submitted the plan to Baron Burian, the Austro-Hungarian foreign minister.

Texas Now Arid Waste.

Austin, Texas. — Texas became a "bone dry" state at midnight Tuesday when approximately 750 saloons closed under a statewide prohibition act. Eighteen hundred saloons had previously been closed by legislative act re-establishing a 10-mile "dry" zone around military camps and shipbuilding plants. Under the 10-mile law, which became effective last April 15, the sale of intoxicants ceased in the principal cities.