

TRANSPORTATION IN PETROGRAD



who complain of cold street cars in American cities are urged to photograph of urban transportation in Petrograd in winter time.

A TREASURE LURE TO DIVERS

Mechanisms Devised to Recover Some of Wrecks Beneath Waves.

SUIT IS DESCRIBED

Explains Device Which Enables Diver to Work Freely Under Pound Pressure - Two Claim Deep-Sea Record.

New York—Before the Germans sank a single vessel in the late war, it was estimated that there were 100,000,000 worth of ships and records indicated that a great part of these were recoverable. The war the ocean's treasure is practically local.

Franklin Leavitt of ... inventor of a diving suit, ... deep-sea record, ...

Mr. Leavitt protests emphatically against the assumption of world-record honors for any diving armor than his own. He protests in these statements:

"I learned a lot," he said; "in fact, I might say I learned more from my first 45 minutes actual experience down on the bottom. In my armor, than I learned from years of theorizing. Take the jointed strut rods down the sides of the legs and both sides of the arms, for instance. They were added after my descent."

Leavitt's Diving Armor. Here he reassembled the armor to show how it worked. The legs and arms, which are very flexible, are made of hard-rolled copper tubing, guaranteed to stand 700 pounds of pressure to the square inch.

"These hinged strut rods down both sides of the arm," said Mr. Leavitt, "take the pressure from the wrist to the shoulder. The shoulder is a solid casting of manganese bronze and has a ball-bearing which allows the man within to move his arms, which would not be possible without ball or roller bearings." Here Mr. Leavitt whirled the arm around freely to illustrate his point.

He called attention to the fact that the cable attached to the top of the helmet has a guaranteed lifting strength of 20,000 pounds. In the center of the cable is the telephone wire, connected directly with a small complete telephone in the top of the helmet. The diver is "connected" simply

with dictaphone ear pieces. The helmet is also equipped with glasses which are triple and nonshatterable. The top of Mr. Leavitt's desk boasts a miscellaneous assortment of ornaments. Here is a piece of hardwood brought up from a wreck. The wood had been 52 years beneath Lake Huron, Mich., but shows no ill effect from its long submergence. Less pleasant, if more interesting, is a strange old black shoe with wide square toe. "A piece of the foot of the girl who had been wearing it slipped out of the shoe after we'd had it here a while," said Mr. Leavitt.

HOLLAND HIT HARD BY WAR

Impression She Was Enriched by It Dispelled by Figures.

COST COUNTRY \$477,787,000

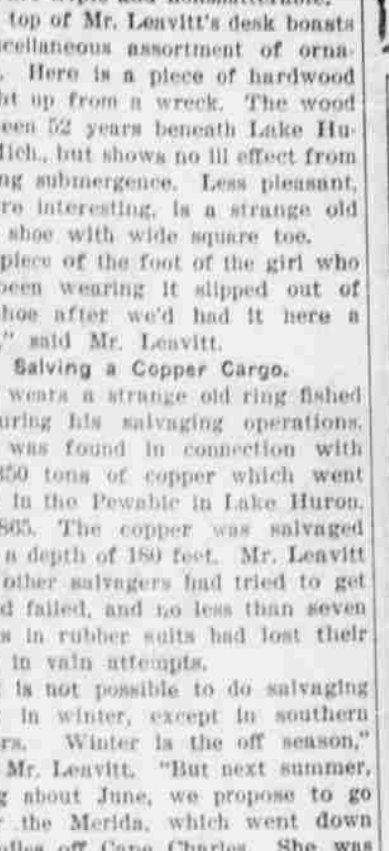
All of Her Industries Suffered, and Much Was Sunk in Certain Foreign Bonds—Suffered Most of Any Neutral.

New York.—Impressions that Holland became enriched by the war are combated in a pamphlet issued by D. J. Steyn Parve, acting consul general for the Netherlands, showing that, by reason of its geographical and economic position, the pressure and evil effects of the war were probably more seriously felt there than in any other neutral country.

On the mainland, the pamphlet says, Holland was entirely surrounded by territory in the hands of one of the belligerents, while the North sea, more than any other waterway, was part of the war zone. As the prosperity of Holland depends upon international intercourse, industries were choked, large outlays were imposed in the maintenance of a defensive army, and there was growing unemployment and the people generally suffered.

Shipping Shrinks. In 1913 shipping in the ports of Holland amounted to 36,220,000 net tons. That volume shrunk to 3,383,000 tons in 1918. Traffic in Amsterdam decreased from 2,597 ships in 1913 to 378 in 1918, and in Rotterdam from 11,285 to 1,181 ships. Rhine tonnage dropped to 1,168,614 in 1913 to 490,732 in 1918. Dutch foreign trade became enervated, owing to the restrictions enforced by both belligerents. Import duties in 1913 amounted to \$5,447,040. In 1918 they were about \$3,000,000, and domestic trade suffered by the reduction. Individuals made excess profits here and there, producing a crop of the newly-rich, but they thrived at the cost of an impoverished country; and against the loss of 247,348 should be reckoned the loss of 22.38 tons of shipping, representing 22.38 per cent of the fleet of 1913. Large profits came from agriculture,

BLACK LOCUST RECOMMENDED FOR WOODLOT



Black Locust Plantation, Trees Five Years Old.

(Prepared by the United States Department of Agriculture.) Black locust—known also as "yellow" locust—is one of the most profitable and useful kinds of timber for the farm. The wood is heavy, hard, and particularly durable when used in the ground. For use as fence posts, black locust is long-lived and very desirable. Only one other wood gives longer service, namely, osage orange or "bois

out field in middle Tennessee which, 20 years previously, had been planted with one-year-old locust seedlings, yielded fence posts worth \$188 an acre on the stump, or \$480 at the railroad about two miles distant. This was a gross return of \$9.40 an acre yearly on a hillside of fairly good soil which before the trees were set out had started to gully badly. Returns of \$5 to \$7 an acre annually have frequently been realized on poor, thin hill land. Good soils underlain with limestone and planted to black locust in the Appalachian and Piedmont regions, from Pennsylvania to Kentucky and Tennessee, can be counted on to yield an average of \$10 an acre yearly at the end of from 15 to 20 years.

The manufacture of insulator pins requires large amounts of black locust, for which purpose it is the most satisfactory wood. Starting Black Locust. In starting black locust, small sprouts with a portion of the root may be dug up and used; or, better, the seed may be sown in the spring in drills in good soil, like onion seed. At the end of the season the seedlings will be from two to four feet in height and satisfactory in size for setting out. This may be done in the late fall, but the spring season, about the time growth starts, is preferable. In some regions the locust wood borer is almost certain to cause extensive damage to young plantations unless special precautions are taken to keep the trees in a healthy growing condition and the bark shaded by foliage, either from near-by trees, shrubs, or weeds. Information on this insect and methods of its control will be found in United States Department of Agriculture Bulletin 787, "Protection From the Locust Borer."

Strange as it may appear, black locust, although one of the most durable woods when set in the ground, matures early and deteriorates in the tree rapidly if not cut when ripe. Commercially the tree is usually mature in 15 to 25 years.

Black Locust Utilizing Rocky Places on Farm Are Indications of Good Farm Management. d'arc," which, however, nowhere occurs in abundance and is so hard that it is difficult to drive staples into it except when it is green. Locust Grows Rapidly. Black locust grows rapidly and yields good-sized fence posts at an age of from fourteen to twenty years, according to the forest service. A worn-

When questioned about the possibility of getting good divers, Mr. Leavitt replied: "Good men are scarce, as you know, for diving or anything else. Still, you can usually get a man, and, if you direct him, he can do almost anything. But usually, if thrown on his own resources, he will be almost helpless."

When asked about the possibility of getting the cargo lost when the torpedoed Lusitania went down, Mr. Leavitt said it should certainly be possible.

"In my armor, I can, if necessary, descend 1,000 feet," he said. "The Lusitania is in 285 feet of water. As to the value of salvage, there is \$2,500,000 gold in her and \$5,000,000 worth of perishable freight, such as copper, brass, iron, etc. There are also \$5,000,000 worth of negotiable securities, quite apart from the valuables, jewelry and cash of passengers."

"The Arabic, lying about sixty miles from the Lusitania, has \$5,000,000 gold in her. She is in about 315 feet of water."

Mr. Leavitt said that the position of these ships would not change perceptibly, as there was at most, a four-knot current at such depths.



Black Locust Utilizing Rocky Places on Farm Are Indications of Good Farm Management.

GOOD TOP DRESS FOR WHEAT Application of as Little as Two Tons of Manure Per Acre May Increase Yield Ten Bushels.

It pays a big profit to top dress the wheat with manure. An application of as little as two tons per acre may increase the yield ten bushels; at least it has done this much one year with another in Indiana tests. Four tons make only about two bushels more.

The manure benefits the wheat directly through the plantfood which it contains, and indirectly through the winter protection, which often is of greater value. Where manure is used as a top dressing the stand of clover is generally better. There is an organic benefit from the manure which is considerable and is not so easily explained. Where as much or more plantfood is applied in the form of commercial fertilizers the resulting yield has not been as large.

CUT STRAW IS BEST BEDDING Much of Liquid Manure, Now Wasted, Can Be Saved by Use of Effective Absorbents.

A great deal of the liquid manure now going to waste can be saved by the use of absorbents, such as straw, sawdust, muck and loam. Uncut straw is a very valuable absorbent, taking up two or three times its weight of water, while fine cut straw will absorb six or nine times its weight of liquid. Moreover, oats straw contains quite a large amount of plantfood, especially potash.

BUYING SMALL FARM TOOLS Time and Money Can Be Saved by Making Purchase on One Order—Give Systematic Care.

(Prepared by the United States Department of Agriculture.) If possible all small tools for the farm should be purchased on one order. This will save time and, usually, money. Also, it will entail a total expenditure sufficiently large to impress the farmer with the importance of giving systematic care to his small

FEEDING HAY AND ROUGHAGE Handling and Hauling of Large Bulk May Be Saved by Giving Products to Live Stock.

(Prepared by the United States Department of Agriculture.) In the marketing of hay and roughage there is a large bulk to handle and haul to the point of delivery. The United States department of agriculture points out that this means much extra labor for the men and teams on grain and crop farms, and much fertility is taken off which might be returned to the fields if the products were fed to live stock.

HOW WHEAT IS DISPOSED OF One-Half of Crop of 1918 Sold by Farmers in Three Months Beginning With July.

(Prepared by the United States Department of Agriculture.) Wheat is mostly marketed by farmers soon, or at any rate, not long, after the harvest. Of the crop of 1918, more than one-half was sold by farmers in the three months beginning with July, and 69.3 per cent in four months. Thereafter the monthly sales dwindled to 1.5 per cent of the year's total in June, 1919.

NICE INCOMES FROM POULTRY Raising Chickens Has Many Attractions for Those Who Enjoy Association With Fowls.

Poultry raising, like raising live stock in general, has many attractions for those who enjoy the work. Men and women often enjoy association with animals and fowls. There are women making nice incomes from poultry.

KILL GOPHERS IN ORCHARDS Rodents Delve Deep at This Time of Year and Sometimes Nest Under Cherry Trees.

(Prepared by the United States Department of Agriculture.) Look out for gophers and get them now. In well-drained orchards they delve deep and nest under the root crown of your best cherry-tree without your knowing it.

POULTRY

POOR HATCHES IN INCUBATOR

Carelessness in Manipulation of Machine Is Sure to Bring Disastrous Results.

Many causes for poor hatches of chicks in incubators can be traced to the operators not educating themselves on what is necessary in the way of fertile eggs, saving eggs for incubation and taking care of them. Eggs for incubation should be kept in a well ventilated room with medium temperature. All eggs should be turned at least once every 24 hours, and no eggs should be over ten days or two weeks old at the outside.

One should be careful to strictly follow the directions accompanying the incubator. The directions for one make of machine do not always do for that of another make, for the ventilation, regulation, etc., may be different.

The principal reason why young chicks die in the shell about the eighteenth day is a poorly ventilated room.

Other causes than poorly ventilated rooms are poorly ventilated incubators, and eggs are not properly fertilized. An egg poorly fertilized will start to grow and die for lack of vitality. Opening up the incubator during the latter part of the hatch, or about the time the chicks begin to pip, lets out the moisture and dries the chicken up in the shell, or, in other words, stops the pores of the shell, and causes a great many to die. Under no condition should the incubator be opened after the eighteenth day until the chicks are entirely hatched.

As a rule, beginners with incubators do not read the book of directions properly. Many a person who has seen an incubator, and probably run a hatch of some other make thinks he knows all about it, does not read the directions and makes a flat failure every time. Sometimes no consideration is given to the ventilation of the room in which the machine is placed. Possibly there may be decayed vegetables therein, or the air is stale.

There are few failures nowadays by poorly regulated incubators, except in the cheaper line of machines where the temperature will change 10. 12



Splendid Hatch from Incubator.

and 15 degrees. One point I have noticed here at home by having a green hand set an incubator, says a writer in an exchange. He reads the directions, maybe thinks he has learned them by heart, sets his regulator as soon as the thermometer gets to 103, turns the thumb screw where he supposes is right, and places the eggs in the machine.

Now, the thumb screw and regulator is a very tender affair, and one turn of the thumb screw will cause a change in the atmosphere inside the incubator of three to four degrees. It should be turned slightly, about one-fourth of the way round, so the temperature stands just at 103.

A great mistake is made by paying too much attention to an incubator. I never see to my machine more than twice a day, once in the morning and once in the evening. I see that the regulator is set properly and everything running nicely before putting in the eggs, and then place the eggs in it and do not touch the regulator. At first it will lower the temperature a little when the eggs are put in, but if the regulator is properly set, the temperature will rise to the proper degree.

TREAT POULTRY FOR VERMIN Bath of Road Dust, Tobacco and Sulphur Is Excellent—Dipping Is Also Favored.

One of the best methods to keep poultry free from lice is to provide a "dust bath." This may be made of a box large enough to accommodate several fowls at a time and partly filled with road dust, tobacco dust and sulphur, according to the following proportion: Road dust, six parts; tobacco, one part; sulphur, two handfuls.

Dipping chickens in a two per cent solution of chlorine is also recommended for the control of lice.