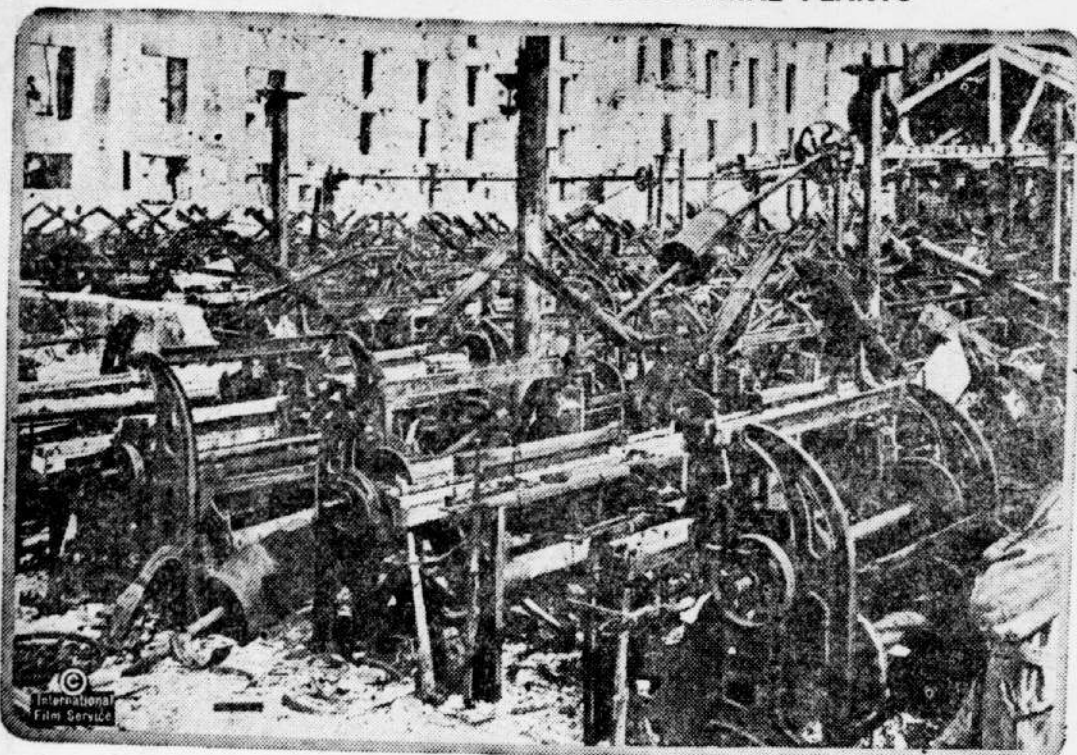
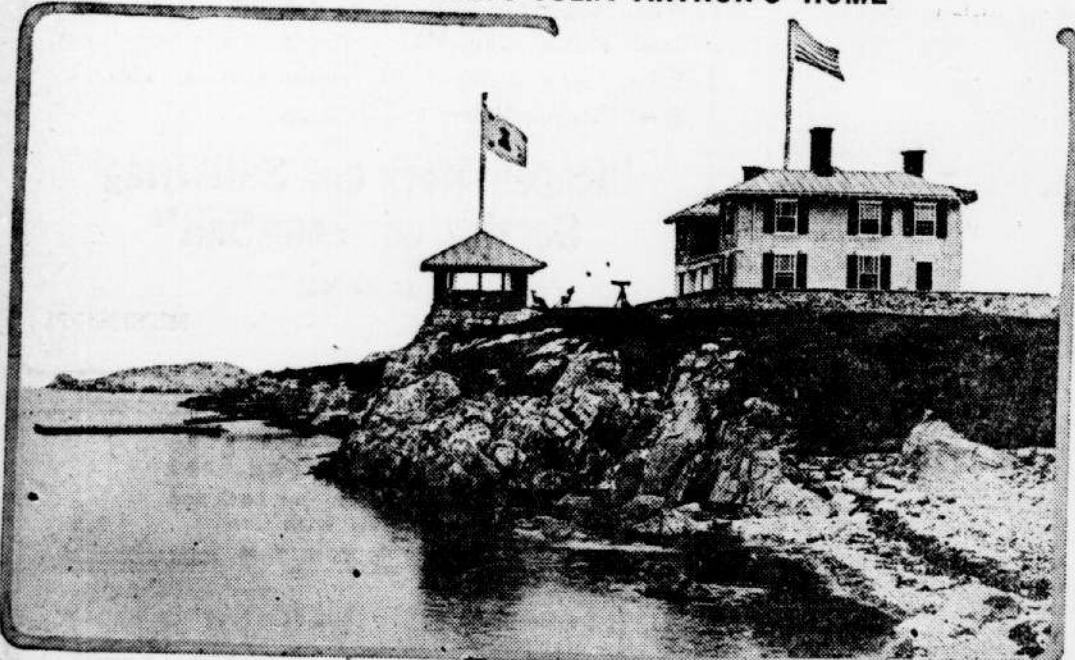


HOW THE GERMANS RUIN INDUSTRIAL PLANTS



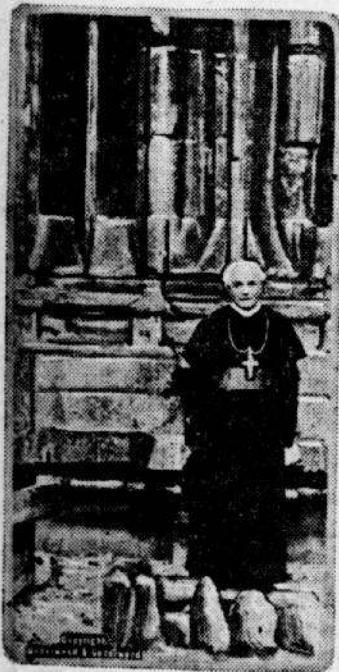
Mute evidence of the ruthlessness of the Germans retreating before the French is this photograph showing the ruins of the spinning room of a weaving and spinning factory on the Oise river in France.

UNCLE SAM WANTS JULIA ARTHUR'S HOME



The home of Julia Arthur, the noted actress, who in private life is Mrs. Benjamin P. Cheney. It is located on Calf Island at the south of Boston harbor, and is wanted by the United States for the extension of harbor defenses.

IN HIS RUINED CATHEDRAL



Cardinal Lucon, archbishop of Reims, standing in his ruined cathedral, now but a shell of its former self, waiting for the explosion of some powerful projectile which may cause the collapse of the whole structure. The cardinal has never deserted his post. He is in good spirits and confident of allied victory. His flock has dwindled down to a mere handful. There are only 5,000 persons left out of a peace-time population of about 115,000. The remaining population live under a military municipal government in command in the bowels of the earth.

Star Closest to Solar System.

Barnard's "Runaway" Star, as the star of remarkably great proper motion recently discovered in Ophiuchus is called by some astronomers, is probably nearer to the solar system than any other fixed star whose parallax has been measured with the exception of Alpha Centauri. The parallax observations at the Allegheny observatory give a value of .5 second, while from micrometric measures made by Barnard, Russell obtains a value of .70 second. The parallax of Alpha Centauri is .76 second, corresponding to a distance of 4.3 light years. According to determinations made by F. Gonnessiat, in France, from a comparison of photographs extending back to 1897, the new star is even nearer than Alpha Centauri. He finds its parallax to be approximately one second, representing a distance of only 3.26 light years.

BEAUTY FOUND IN UGLINESS

Scientists Have Discovered Attractiveness in Creatures Endowed With Marvellous Hideousness.

Everybody is familiar with the extreme ugliness of the bulldog's face that makes the animal positively attractive; and everyone who has studied the moths is familiar with the marvelous hideousness—or beauty—of the larva of the Automeris. The larva is found from Canada to Florida and

FOOD AND DRINK FOR SOLDIERS AT VERDUN



A French official war photograph showing how baby carriages are utilized in conveying food and drink to the soldiers at Verdun.

Cheap and Nourishing Dish.

Two ounces of oatmeal are sufficient to make a plateful of porridge, and this, with a pennyworth of new milk, and some sugar, provides a more nourishing meal than a mutton chop, without the fat, or half a pound of lean steak.

The porridge, too, contains all that the body requires—sugar, starch and fat, to provide for the energy and warmth of the body, the albumen for forming the muscles, and the minerals for building the bones and enriching the blood, but the steak provides for the formation of muscle alone, with a mere trace of the requisite minerals.

Whale Oil.

The total production from Norway of whale oil during 1916 amounted to 367,400 barrels, as against 475,000 barrels in 1915, 575,000 in 1914, and 690,000 in 1913. The world's production of whale oil during 1916 amounted to 634,500 barrels. Compared with the world's production the Norwegian production during 1916 was about 58 per cent, during 1915 about 75 per cent, during 1914 about 78 per cent, and during 1913, 77 per cent.

Modern Prairie Sod House.

Speaking of the trip which he and his brother recently made through western Kansas, eastern Colorado and western Oklahoma, W. A. Stauffer says that sod houses are still very common in that section of the country—in some places as common as frame houses. And many of them are so well finished inside that they would scarcely know that they were of sod—plastered, papered and good woodwork. He stopped at many of these places and found that many of the people living in these sod houses have automobiles and are quite well-to-do.—Marion Record.

Fruit Combinations.

With the assistance of nature, Luther Burbank has invented a new apple which is described as "a triple combination of the alligator pear, the yam and the regular apple." The new fruit is a salmon pink in color, with a leather-like covering, and is said to be adapted for use in salads. If Mr. Burbank continues his experimental work, we may expect that he will some day succeed in producing a combination quince, kumquat and custard pie.—Providence Journal.

beautiful creature from birds and other large enemies, she has left it open to attack from the tiny ichneumon wasp which drives its sting between the spines and there places a parasitic egg. In this way multitudes of the larvae are destroyed.—Popular Science Monthly.

The Unconquerable Habit.
"Believe in signs?"
"Everything but 'fresh paint' signs. I always try them out to see if they're telling the truth."

IN THE LIMELIGHT

BENEFITED BY AMERICAN TRAINING

Sir Eric Campbell Geddes, who has been appointed new first lord of the British admiralty, succeeding Sir Edward Carson, is one of the handful of great Britishers who emerged out of comparative obscurity with the advent of the war. Until hostilities began he was scarcely known outside of railroad circles, and American railroad men knew him best, for it was in the United States that he got his training.

The new first lord is a Scotsman, born in India, but owes his ability in a large degree to his American training. He is only forty-one years old.

He spent a year in the Homestead mills in Pittsburgh, and backed that experience with three years in the employ of the Baltimore and Ohio railroad.

When Lloyd George took the post of minister of munitions in 1915 he made Sir Eric his principal lieutenant, or director general. In that post he controlled the supply of heavy guns, small arms, munitions, etc.

Sir Douglas Haig had him transferred to France as director general of transportation. He was knighted only last year.



POWERFUL RECRUIT FOR RED CROSS



Another addition to the business executives enlisted in the service of the Red Cross during the war was made when John D. Ryan, president of the Anaconda Copper company, was appointed as director general of military relief.

Mr. Ryan will have supervision of the bureau of medical service, the bureau of nursing service and the bureau of supplies. The maintenance of 50 or more base hospitals will be one of the large tasks which will be laid immediately before him.

He has the position of director general of military relief and will be in charge of all relief work for the fighting forces.

Mr. Ryan succeeds Col. Jefferson R. Kean, who has been ordered to take command of the 160 United States army ambulance sections in the war theater.

The military relief department was organized by Colonel Kean in 1916 and in the past few months he has built up, through it, a great machine for relief work at the front. It was because of his intimate knowledge of this work that the war department made him commander of the army ambulance sections, which were first to carry the American flag to the fighting lines.

DIRECTED TO BUILD MERCHANT MARINE

The biggest constructive job since the building of the Panama canal, the task of fitting together a fleet of merchantmen that is to save Europe from hunger, and possibly starvation, has been turned over to a Chicago man—Edward N. Hurley.

Edward N. Hurley was picked, probably, because of his record of achievement. He is not a politician. He is a business man. It is not so many years ago that he was sitting on the throttle side of an engine cab for the Chicago, Burlington and Quincy railroad. From this position he stepped into a salesman's job for the United States Metallic Packing company, of which concern he soon became manager.

For this enterprise he originated and developed the pneumatic tool industry of the United States and Europe.

He is the executive head and principal stockholder of several manufacturing and industrial concerns that have sprung from the development of this industry. His interests, however, are so diversified that they include banking and railroading as well, and have so broadened his outlook that his reports on his different studies of trade conditions and credits are regarded as some of the most authoritative contributions to the literature of American commerce.

Mr. Hurley has long been an advocate of an enormous merchant marine for the United States to open up neglected trade channels. And now he has been assigned to build it.

NAVAL CONSTRUCTOR PRACTICAL MAN



When Secretary Daniels informed Rear Admiral Washington Lee Capps that the president had selected him to build the merchant fleet that we must have if the U-boats are to be conquered, a shipbuilder had succeeded an engineer in a job upon which the destiny of democracy depends.

Admiral Capps will build ships in quantities desired, on order, for building ships, one way or another, has been his steady job for 30 years. He is a practical man, and as chief constructor of the navy has the innermost details of every yard in the country that bears the slightest resemblance to a shipbuilding plant in the grasp of his two hands.

The work upon which Admiral Capps has been employed since the new naval building program went into effect a year and a half ago is directly in line with that which he will have to do now in his new position. A man with an international reputation as a naval constructor and administrator, his failure in a post for which he has been trained by years of practical service, could come about only through politics and disagreements with associates, from which he has the instinct to steer clear. He will take orders and obey them, although he will not surrender a professional opinion.

His selection will have an excellent effect upon the country, which would have resented the virtual removal of the builder of the Panama canal if his successor had not been a man of high professional standing, fully acquainted with the construction of ships and ready to go ahead under full steam in the prosecution of an enterprise that had been standing still for so long a time that it was beginning to be possible to calculate delay in terms of human blood.

THINGS WORTH KNOWING

The population of Uruguay is 1,378,808.

Wisconsin has barred tramps from the state.

A town of cement buildings is being constructed in Montana.

The co-operative warehouse is gaining in popularity in the South.

The Italian Mannlicher-Carcano rifle is of the 1891 pattern. It is rather slow, discharging only 15 rounds of shot a minute.

The world's normal yield of the six great cereals ranges from 16,000,000,000 to 19,000,000,000 bushels.

The Indians who know the bee only as introduced by the white settlers call it the "white man's fly."

One of the latest inventions is a sort of halter that keeps a sleeper's mouth closed and thus prevents snoring.

A number of leading American railroads are at present conducting a publicity campaign which has for its object the warning of the public not to trespass on railroad tracks.

SHEEP TICK CAUSES LOSS TO THE OWNER



MONEY MAKERS ON ANY SOUTHERN FARM.

(W. H. DALRYMPLE, Louisiana Station.)

The sheep ticks or their young may be found on sheep at all times of the year, but appear most numerous in the spring and are especially noticeable at shearing time on the old sheep after they have been deprived of their shelter.

This pest, although it seldom causes any very serious damage, either to the sheep or the wool, is at all times an annoyance and occasionally causes decided losses to the sheep owner, being a blood-sucker and producing considerable irritation, which varies according to the number of the ticks present. Fortunately, these ticks may be readily destroyed by suitable dips or dressings; and it would be well, whenever discovered, to have the sheep treated to prevent the dissemination of the parasites.

One of the dipping solutions recommended is kerosene emulsion, which may be prepared as follows: Dissolve one-half pound of common soap in one gallon of boiling water. Remove from

the fire, stir in two gallons of coal oil and agitate thoroughly until it is emulsified. Use one gallon of this emulsion to eight or ten gallons of cold water, which should also be well mixed. Fifty gallons of this solution will suffice for 50 sheep. Any quantity of this solution may be prepared by observing the above-mentioned proportions.

Any of the coal-tar dips on the market, such as kresol, etc., will also serve as a dipping solution of about two percent strength with water.

Sheep that have been dipped should not be turned into the old pens or pastures until about a week afterward, by which time it may be presumed that any ticks left on the ground will have died. And any sheep recently purchased, especially from the northern section of the country, should always be dipped or otherwise treated before being turned out among the home flock, so as to prevent, if possible, the further introduction and distribution of these parasites.

SWEET-POTATO ENEMY

Leaf-Folder Found at Brownsville, Tex., and in Louisiana.

Field Workers of Bureau of Entomology Find Insect Can Be Controlled by Careful Spraying With Arsenate of Lead.

(From the United States Department of Agriculture.)

Sweet-potato growers are warned to be on the alert against a new insect pest, the sweet-potato leaf-folder, which was found in 1916 in injurious numbers in the region of Brownsville, Tex. It has been noted also in Louisiana. Field workers of the Bureau of Entomology of the United States department of agriculture who have studied the new pest at Brownsville found it can be controlled by careful spraying. Arsenate of lead, used at the rate of one pound of powder to 50 gallons of water, or zinc arsenate, used at the rate of one pound of powder to 40 gallons of water, were found effective. These sprays destroyed from 93 to 96 per cent of the larvae on the sweet-potato vines.

The sweet-potato leaf-folder constructs a shelter by folding a leaf or drawing two leaves together with silk which it spins for the purpose. As it increases in size it devours most of the leaf except the larger veins and midrib. In 1916, at Brownsville, Tex., the pest was first observed about the middle of September. By the middle of October the caterpillars had become so abundant that it was found advisable to spray immediately. When done early one spray application may be sufficient, whereas if treatment is delayed until a large number of larvae have spun cocoons, two or more applications may be necessary in order to effect complete control.

Natural enemies of this insect in Texas are the jackdaw or boat-tailed grackle and the spined soldier bug.

COTTON CROP IS NEGLECTED

Careless Wrapping, Sampling Abuses and Indifferent Storage Illustrate Disregard.

There is no agricultural product that is so neglected as American cotton. The careless wrapping, the sampling abuses, indifferent storage and country damage all combine to illustrate in a most striking manner the utter disregard of consequences and careless indifference which exists in the handling and marketing of this important and valuable crop. In no other case does a farmer care for his product from the time it is planted in the spring until it is harvested in the autumn, and then expose it to all kinds of weather and abuse.

MORE ACREAGE FOR TURNIPS

Vegetable Is Fine for Human Consumption—Cowlot Makes Ideal Spot for Growing Crop.

The turnip acreage should be increased this year. Turnips are fine for human consumption and are easy to grow. Many farmers fix a cowlot at this season of year in which the cows are milked and penned at night, using this rich spot for turnips in fall.

Don't Neglect Chickens.

Keep the poultry house clean and free from lice. At present prices chickens mean money and should not be neglected.

There's a Difference.

The difference between thin cream and rich cream is that thin cream contains less milk.

Late Corn Crop.

Make another planting of garden corn for a later crop of roasting ears.

GRAIN FOR PRODUCING COWS

Much Depends on Quantity of Milk Given and Food Obtained From Good Pasturage.

Does it pay to feed grain to cows on pasture? The results obtained at the University of Missouri College of Agriculture indicate that it depends largely upon how much milk the cows give and how good the pasture is. If a cow is producing less than a pound of butter each day the necessary food can be obtained from a good pasture. If she produces more than this some grain can be fed profitably. This means that a Jersey cow should be able to get enough food from grass to make about 20 pounds of milk daily and a Holstein about 25 to 30.

It will pay to feed grain to all cows which give more than this amount, since high-producing animals cannot gather sufficient feed in the forage of grass. A cow giving a pound and a half of butter daily should receive about five pounds of grain daily, and one giving two pounds of butter should receive seven or eight pounds of grain. When not more than four or five pounds of grain are fed it may consist of corn. If more than this is needed, some bran or a small amount of cottonseed meal should be added. These recommendations hold good only when pastures are good. In late summer it will often be necessary to feed more grain to high-producing cows or give some silage or green feeds to help out the pastures.

STAPLE FOOD CROPS NEEDED

Enlarged Production Is Greatest and Most Important Service Required of Farmers.

Secretary of Agriculture Houston, in urging the planting of a heavy acreage of food and feed crops, emphasizes particularly the practical certainty that all such crops will bring very high prices. He says:

"It is obvious that the greatest and most important service that is required of our agriculture under existing conditions is an enlarged production of the staple food crops. Because of the shortage of such crops practically throughout the world there is no risk in the near future of excessive production such as sometimes has resulted in unremunerative prices to producers. This is particularly true of the cereals and of peas, beans, cowpeas, soy beans and buckwheat. In view of the world scarcity of food, there is hardly a possibility that the production of these crops by the farmers of the United States can be too great this year, and there is abundant reason to expect generous price returns for all available surplus."

RAISE BIG CROP OF CELERY

Cannot Be Done Without Liberal Supply of Moisture, but Many Gardeners Are Trying It.

It is out of the question to grow a big crop of celery without a liberal supply of moisture, but many gardeners are trying to do it. Numerous failures could be cited where there was little hope of success even if the season had been favorable. Unless it is possible to irrigate, it is never safe to plant this vegetable on a large scale, except in naturally moist soils abounding in humus.

Mulch Around Trees.

Maintain a thick straw or manure mulch around newly set fruit and shade trees if you would have them make their best growth.

Seed for Fall Crops.

Do not forget to sow seed of cabbage, collards and tomatoes for the fall crop.

Cloudless Field Is Ideal.

A cloudless day is the farmer's ideal. A cloudless field should be the farmer's.