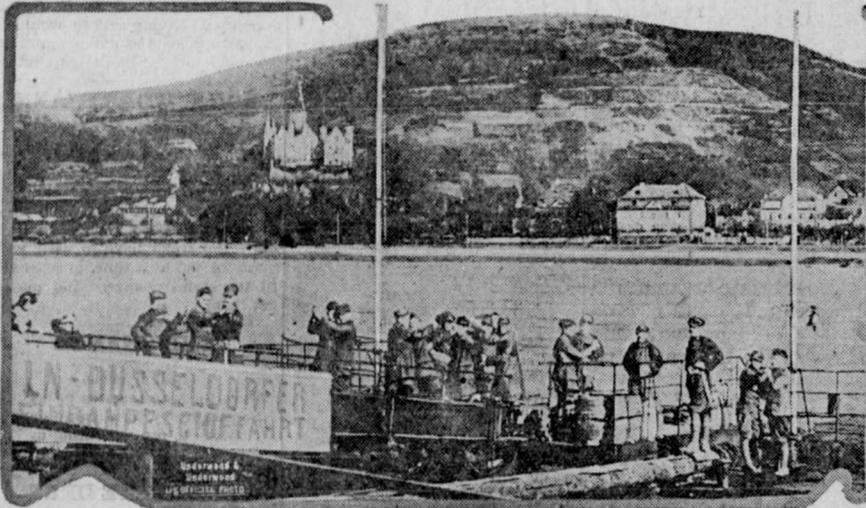


## U. S. MOTORLAUNCH PATROLLING THE RHINE



An American motor launch manned by American soldiers doing patrol duty on the Rhine.

## DOUGHBOYS HAVE THEIR DANCE ON THE RHINE



In the heart of every doughboy of the A. E. F. in France there no doubt lingered a hope that he would some day spend a "pleasant afternoon" on the banks of the Rhine in Germany. How this hope was made a fact is shown in the above photograph of men of the Rainbow division dancing on the boat docks at Neiderbreisig.

## SHIPPING BOARD UNIFORM



A new uniform has been adopted by the United States shipping board to be worn by the men training for a career at sea. It is similar to the uniforms worn by sailors in our navy with the exception of a few markings. It has the shipping board insignia on the pocket of the blouse, and two broad stripes are worn on the collar and cuffs.

## Mettle of the Pasture.

A young soldier while engaged in the desperate fight at Cantigny was found by some of his American pals at the conclusion of a particularly desperate fight squatting in the middle of a piece of grass-covered ground. He had a little pile of hand grenades at his side, and there were several enemy dead on the outskirts of the little green oasis. He had been fighting like a demon, single-handed.

"What's the idea?" asked the sergeant, running up; "why stay here—it's all over."

"See this grass?" was the answer, pointing to a lush patch that had been put to seed by French peasants before their retreat in the face of falling shells. "I'm keeping it for a cow back of the lines that belongs to a family I'm billeted with. It's the only pasture in 40 miles."—Argonne Standard.

## DONKEY IS HER ONLY HELPMATE NOW



This donkey hauled the old lady to southern France when the Huns came into northern France, and has now hauled her back again to Cutry, her home town, where she lives in a cave with her donkey, the only companion she has left in the world.

## LEARNING TO MAKE WOODEN DOLLS



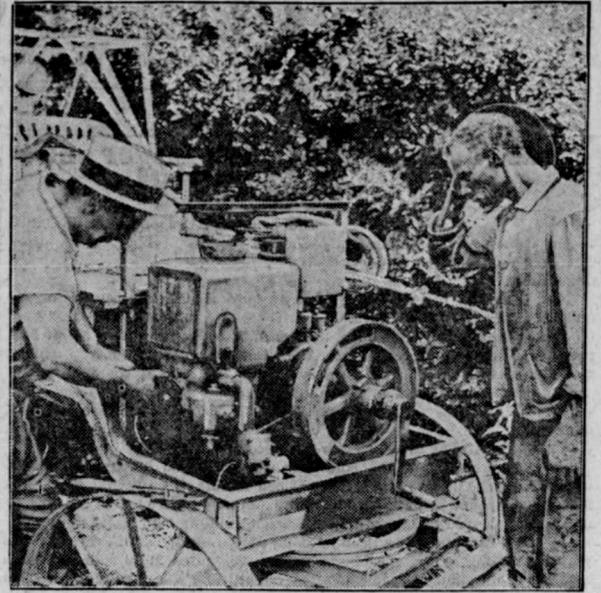
One of the most vital things in the reconstruction of the wounded and disabled soldier is to keep his mind occupied. This is done in France sometimes by teaching them how to make wooden dolls. The photograph shows a group of wounded at Savanay being instructed in this art.

## Skeletons of Prehistoric Animals Is Chief Product of Large Nebraska Ranch

Where do the museums of the country get their strange and curious skeletons of prehistoric animals? If the skeleton is a "dinohyus" or a "moropus," one may be quite sure that it came from the farm of James Henry Cook, in the northwest corner of Nebraska; and the chances are almost equally good if the specimen happens to be a saber-toothed cat or a many-toed horse, or almost any of those queer animals that belong to the early Miocene period, writes R. P. Crawford in Popular Mechanics Magazine. Most ranchmen and farmers are quite content to raise the ordinary sort of stock, but here is a ranch that is most widely known because of its output of prehistoric animals. For more than a decade paleontologists from the great universities and museums of this country have made regular trips to these fossil quarries.

The Cook farm and ranch, located close to the Wyoming line, comprises some 15,000 acres. On the eastern edge of the ranch the Niobrara river has laid bare two hills, from both of which scores and scores of fossil skeletons have been quarried. In the summer it is no uncommon occurrence for representatives of half a dozen eastern institutions to pitch camp near these hills and spend several months digging out the fossil bones which, when worked over in the museum, form the queer-looking skeletons.

## OPERATION OF GASOLINE ENGINE IS NOT DIFFICULT IF INSTRUCTIONS ARE OBEYED



Repairing a Gas Engine on a Power Spraying Outfit.

(Prepared by the United States Department of Agriculture.)

The gas engine, a great labor saver on thousands of farms on which stationary engines, tractors, motor trucks or automobiles are operated efficiently, is also at times the cause of a great waste of labor. Often large crews hired to help with thrashing, hay baling, cutting ensilage, etc., draw full wages for hours spent in idleness owing to inefficient handling of the engine. A man frequently will spend much more time and energy in starting a gas engine to pump water for stock, run a milking machine, or for some other similar purpose, than would be required to do the work by hand. The time lost throughout the country in this manner, enormous in the aggregate, is to a great extent preventable.

It is not desired to convey the impression that gas engines usually give trouble, or are difficult to operate, for this is by no means the case. Delays from engine trouble are usually due to the operator's ignorance of some of the details essential to proficient operation.

## Use Information Furnished.

All catalogues and directions furnished by the manufacturer should be studied carefully. If none are received with the engine, a request for them should be sent promptly to the manufacturer. It is to be regretted that a few manufacturers are rather lax in the matter of furnishing such material, although it is obviously to their interest to make use of this comparatively inexpensive method of assisting the purchaser to obtain satisfactory service from the engine.

Any instruction book furnished by the manufacturer should be kept in a safe place, but convenient for reference.

It is safe to assume that the man who made the engine knows something about its operation and can give some information of value to the purchaser. In altogether too many cases, the instruction book and other literature intended to be of assistance to the user of the outfit are either thrown away or ignored completely, and not infrequently a man is sent from the factory, or a local expert is hired, to make simple adjustments concerning which full instructions are given in literature furnished by the manufacturer but which had never been read by the owner.

## Lubrication.

A large percentage of repair expenses is due to insufficient or improper lubrication. In far too many cases owners of gas engines use grades of oil entirely unsuited to their engines, notwithstanding the fact that in each case the manufacturer has furnished a long list of various brands and grades of oil which have been tested and found suitable to the engine in question, and which can be obtained practically anywhere in the country.

Another common error is to use too little oil. It is poor economy to try to save on oil. On the other hand, an excess of oil in the cylinder, while better than too little, will cause carbon deposits, followed by loss of power, overheating, and preignition. Heavy, bluish smoke from the exhaust indicates that the cylinder is getting too much oil, but it is usually advisable to furnish enough to give at least a slight trace of bluish smoke.

If the cylinder is oiled from the crank case by the splash system, the lubricant being used over and over again, the oil should be examined frequently, and as soon as it becomes badly discolored or very thin it should be drained out and new oil substituted. Many manufacturers furnish directions as to how often this should be done. Filling the crank case with kerosene after draining out old oil, and then running the engine a few minutes without load, in order to remove dirt and carbon from bearings and other parts, is frequently recommended. This is good practice where the crank case can be drained completely, but on many engines there are pockets which cannot be fully drained, and the kerosene remaining in these pockets will thin the new oil. Under such circumstances the rinsing is of doubtful value. After such rinsing is done, the engine should not be run at full speed

or under load until the new oil has had ample time to reach all bearings. The dirty oil drained off may be filtered and used for oiling other farm machines, but it should not be used again in the cylinder. If the oil in the crank case quickly becomes thin it is evident that some of the fuel is getting past the piston rings. This seriously affects the lubricating quality of the oil. It should, of course, be replaced with fresh oil, and steps taken to improve the carburetion so as to form a fuel mixture which will burn more completely.

## Keep All Nuts Tight.

It requires but a minute or two to go over an engine and see that all screws and nuts are tight, at the same time wiping off any oil and dirt which have collected. This should be done at least once every day the engine is used. Such practice will go far toward preventing many operating troubles, since all gas engines vibrate to some extent and this vibration tends to loosen bolts, nuts and other parts. This is always a potential source of breakdowns, if not of serious accidents. Furthermore, loosening of parts often results in a loss of power.

## MAKE GOOD COWS

The following things that go to make good cows: (1) Good breeding (good sires), (2) proper development of the heifers, (3) not breeding heifers too young, (4) liberal and proper feeding, (5) accurate records, (6) good care, (7) healthy cows.

## PLAN FOR BETTER PASTURES

Cut Useless Trees and Remove All Rubbish and Brush—Top Dressing of Manure Is Good.

(Prepared by the United States Department of Agriculture.)

Cut or denude all trees except those needed for shade, and clear off the brush and rubbish. Pasture plants can not compete with timber. One should decide whether he desires woods or pasture and act accordingly.

Have the shady places on the higher parts of the field and not along running streams or around ponds. Much fertility is lost from grazing lands because this rule is not more generally followed.

Fertilize as you would for a good meadow. There is nothing better than an occasional top dressing of stable manure. This should be applied in the fall or winter. Acid phosphate and basic slag are very efficient in promoting the growth of tame grasses and clovers and they in turn tend to crowd out the weeds. The weed problem in closely grazed pastures on rich soils is practically nothing.

Reseed an old pasture only as a last resort. If pastures in the East fail, it is usually because of depleted fertility and not from lack of seed. Reseeding should be done in a thorough and not a slipshod manner and only after the fertility of the soil has been restored.

## GATHER UP ALL SCRAP IRON

Old Castings Scattered About Farm Would Bring Tidy Sum at Present Price for Metal.

Government publicity experts are sending out a circular advising farmers to gather together the scrap metal scattered about the premises and sell it. Enough old castings could be picked up on some farms to net quite a tidy sum at present prices.

## SUNLIGHT NEEDED IN GARDEN

There is No Substitute for It and Vegetables Will Not Thrive Without It.

You can wear out your hoe, cultivating; exhaust the available water supply; water; go broke buying fertilizers; and still fail if your vegetables do not get sufficient sunlight. There is no substitute for sunlight in gardening. It's no use trying to find one.

## Mothers' Cook Book

These are the gifts I ask  
Of thee, Spirit serene,  
Strength for the daily task,  
Courage to face the road,  
Good cheer to help me bear the traveler's load,  
And for the hours of rest that come between,  
An inward joy in all things heard and seen.

—Henry Van Dyke.

## Savory Dishes.

A good meat substitute which will be found worth while trying is

### Boston Roast.

Soak two cupfuls of dried lima beans over night. Drain and put to cook in boiling water. When tender, drain and retain the liquid. Press the beans through a sieve, add two cupfuls of pecans or English walnut meats, chopped fine, half a cupful of strong cheese, grated or finely cut, half a cupful of soft bread crumbs, one-half cupful of very finely chopped celery, one teaspoonful of salt, one teaspoonful of grated onion, a few dashes of pepper, one egg beaten light, and enough of the bean liquor to mix into a compact loaf. Grease a baking pan, put in the loaf and bake one-half hour, basting with vegetable oil and water, four times. Serve with a brown or tomato sauce.

### Savory Rice.

Cook a cupful of well-washed rice in a quart of water for three minutes, then drain and rinse with cold water. Return the rice to the fire with two tablespoonfuls of chicken fat and an onion cut in slices, cook until the fat is absorbed, then add two cupfuls of chicken broth, two cupfuls of tomato pulp, a teaspoonful of salt, half a green pepper cut in shreds, and a dash of paprika. Cook until the rice has absorbed all the moisture. Add a half cupful of grated cheese and turn about the chicken on a hot platter. The cheese may be omitted if not well liked.

### Apple Tapioca.

Soak three-fourths of a cupful of pearl tapioca in cold water to cover for one hour. Add one-half teaspoonful of salt. Pare and core six mellow apples and set closely in a buttered baking dish. Fill the centers of the apples with sugar or with apple jelly; pour around them the tapioca and bake until tender. Add bits of butter to each apple before serving.

### Cream Rice.

Combine one quart of milk, two tablespoonfuls of uncooked rice, one-half teaspoonful of salt, four tablespoonfuls of sugar, a half cupful of raisins and bake in a slow oven three hours. Serve with a hard sauce.

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Notes of Science

Pickled peanut meal is used for bait by French sardine fishermen.

A stool attached to a piano with a hinged bracket has been invented.

Ecuador has established a course in scientific agriculture at its central university.

According to an English scientist there are 15,000,000 fat globules in a drop of milk.

For handling cakes of ice an inventor has patented mittens with metal points in the palms.

Shortage of Sugar Bags.

Sugar planters in the Hawaiian Islands are facing a shortage of bags used as containers for raw sugar. These bags have been imported from Calcutta. Recently machinery was sent to Honolulu from Washington for manufacturing the bags from the fiber of banana tree trunks.