

PORK GROWN MOST CHEAPLY BY FEEDING SOME GRAIN TOGETHER WITH FORAGE

It Has Been Shown at Different Experiment Stations That the Best Forage Crops Are Little More Than Maintenance Ration—Alfalfa Excels.

Results of investigations at the Missouri experiment station indicate clearly that pork can be produced most cheaply by feeding grain in combination with forage.

The kind of grain depends, of course, upon the forage crop. In the work done at the station, in general, when the forage was a legume, such as alfalfa, clover, cowpeas or soy beans, straight corn and one-half to two pounds of non-leguminous forage, such as bluegrass, rape and oats, sorghum or rye, the corn was supplemented with linseed oil meal. In the case of forage made up of six parts corn to one part of oil meal.

While the kind of grain to feed is

amount foraged off by hogs. At this station, with half feed of grain, alfalfa was found to carry twelve head for 165 days.

While it took five or six pounds of grain to the pound of gain, in dry lot feeding, only a trifle over three pounds was required when the hogs ran on alfalfa.

A red clover ranks next to alfalfa as a forage crop for swine. It will carry 10 or 12 head per acre on rough pasture for 150 long a period as will alfalfa. In 170 different trials 775 values were obtained for clover for hog feed is more than \$34. Care should be taken with clover not to pasture it too closely, and to

SOLDIERS EXONERATED

Ball Charged Two M. N. G. Men Charged With Slaying Ely at Jackson.

In their report to Gov. Osborn on the investigation of the shooting by Capt. F. L. Blackburn and Private Howard Jackson of John Ely at Jackson two weeks ago, the military court of inquiry says:

"The court finds as a matter of law that Capt. Frank L. Blackburn, Lieut. R. P. Smith, Private Howard Jackson and Clara McArdie are not really responsible for the death of John Ely and that their action in the matter of his death was due to their obedience to the order to aid in maintaining order and protecting property at the prison; in other words that the homicide was justifiable."

The report is a voluminous one including all the testimony taken which is referred to in the findings of fact and law, brief setting forth the reasons for the court's action, based on the opinions of the court.

The death of William Hippolite, who was killed in a gravel pit at Lansing, brought to a close a life marked by a remarkable series of mishaps. When a young man, he was deprived of one eye shortly afterwards he was badly crushed by a truck and crippled for life. A few years later, he slipped in a cylinder of a threshing machine and lost his right leg at the knee.

THE MARKETS

DETROIT—Cattle—Market steady.—Feeder calves, 100 to 1,200, \$2.10 to \$2.30; grass steers and heifers that are fat, 500 to 1,000, \$10.00 to \$12.00; heavy steers and heifers that are fat, 1,000 to 2,000, \$12.00 to \$14.00; stock heifers, \$10.00 to \$12.00; common milkers, \$12.00 to \$14.00; choice milkers, \$14.00 to \$16.00.

Sheep and lambs—Best lambs, \$6.75 to \$7.00; medium lambs, \$6.00 to \$6.50; common lambs, \$5.00 to \$5.50; yearlings, \$5.00 to \$5.50; ewes, \$5.00 to \$5.50.

Hogs—Market steady.—Common hogs, \$10.00 to \$12.00; heavy hogs, \$12.00 to \$14.00; stock hogs, \$10.00 to \$12.00; common milkers, \$12.00 to \$14.00; choice milkers, \$14.00 to \$16.00.

The Top o' the Mornin'
Always, from
Birg's
Heights

Cement Walks, Shade Trees and Public Sewers



More Economical Both in Use and Cost CALUMET BAKING POWDER

—And it does better work. Simply follow your customary method of preparation—add a little less of Calumet than when using ordinary baking powder. Then watch the result. Light, fluffy, and evenly raised—the baking comes from the oven more tempting, tastier, more wholesome.

Calumet *defeats* the baking of an expert. Ask your grocer to-day.



RECEIVED HIGHEST AWARDS

World's Pure Food Exposition, Chicago, Ill. Paris, Exposition Universelle, France, March, 1912.

Excellent Berkshire Type.

Important, the amount of grain is of equal, if not greater, importance in determining the economy of grains. It has been shown at different stations that the best forage crops are little more than a maintenance ration.

If gains are to be made, then, it is necessary to feed some grain in addition to the forage. Experiments indicate that the greatest economy of grain through the use of forage is obtained when one and one-half to two pounds of grain are fed daily for each 100 pounds of live weight. The best general rule is to feed enough grain to cause the hogs to make a daily gain of three-fourths of a pound for each 100 pounds of live weight.

Where alfalfa can be grown successfully there is probably no crop that will give better results for swine feeding. An acre of alfalfa will pasture, during the grazing season, from ten to twenty hogs. The important point to be observed is not to pasture too closely. Best results are obtained by pasturing that one and one-half to two pounds of hay may be taken off the field during the season in addition to the

let it reach a height of 10 to 12 inches before turning out.

The best results with annual forage crops at this station have been obtained with rape in which have been sown a few oats. The Dwarf Essex is the variety of rape used. If it is not pastured too closely it will come up again after the first growth, in favorable seasons. The data in this series of experiments with rape showed that an acre of it is worth \$23.84 for pork making. At the Wisconsin station better results were obtained with it, surpassing even the clover.

Bluegrass requires the feeding of more grain than do these other crops, and it is only available in the early summer and after the fall rains. In a number of trials at the Missouri station the average return was found to be \$15.18 per acre.

In general the amount of grain required to make a pound of pork in the dry lot was 5.11 pounds, and the amount required on forage was 2.19 pounds. Thus there was a saving of about 50 per cent of grain, which is replaced by the cheaper forage.

HOE IS MOST HANDY OF FARM IMPLEMENTS

Most Useful Tool in Equipment of Gardener or Farmer—Should Be Kept Sharp.

By H. G. WEATHERSTONE.

So many people have a horror of the hoe that the most comfortable implement to be found in the equipment of a gardener or farmer, and it is handy to use for so many purposes that one cannot get along without it.

Probably one reason that people do not like the hoe is that most hoes consist at once of a "dull" as a hoe came into proverbial use.

A dull hoe is certainly not a pleasant implement with which to work. The good gardener will keep his favorite hoe filed to a sharp edge all the time. It is impossible to grind a hoe on a grindstone because the bevel must be on the upper side of the blade when it is in use in order to make the hoe "bite" into the soil.

Elle your hoe, maintain the bevel about twice as wide as the thickness of the blade. Then keep it bright and when you go out after weeds the hoe slips through the soil and weeds are cut about twice as wide as the thickness of the blade. Then keep it bright and when you go out after weeds the hoe slips through the soil and weeds are cut about twice as wide as the thickness of the blade. Then keep it bright and when you go out after weeds the hoe slips through the soil and weeds are cut about twice as wide as the thickness of the blade.

EFFECT OF PLOWING ON YIELD OF WHEAT

Results Given of Experiments at Oklahoma Experiment Station

An experiment was conducted at the Oklahoma station for the purpose of determining the effect of early mowing and late plowing upon the yield of wheat. As an average for five seasons, July plowing gave a return of 27.1 bushels per acre, August plowing yielded 24.2 bushels per acre, while land which had turned about the middle of September brought only 20.5 bushels per acre as an average.

If the wheat fields are plowed in July and are then worked down with tillage implements so that they do not present rough open surface, and if rain which may fall throughout the summer will be absorbed and subsequent culture will enable the grower to care this supply for his crop. The same plan can be followed in preparing fields for alfalfa seeding.

Where it is intended to prepare the soil early in September, officials of the station recommend that special effort should be made to pulverize the soil bed thoroughly after plowing. If the soil is not pulverized sufficiently abundant, the crop will come through in good condition.

The Army of Constipation

is Growing Smaller Every Day. CARTER'S LITTLE LIVER PILLS are responsible—They not only give relief—they permanently cure Constipation. Millions use them for Biliousness, Sick Headache, Sallow Skin, Small Pits, Small Bows, Small, Prick, Genuine must bear Signature.

DR. J. P. KELLOGG'S **ASTHMA** Remedy for the prompt relief of Asthma and Hay Fever. Ask your druggist for it. Sold by FINE LITTLE NORTHROP & LYMAN CO., INC., BUFFALO, N.Y.

Cause of Spoiled Eggs.

A. B. Lee, a special agent of the government, is going to establish an egg experiment station at Frankfort, to see why eggs spoil so quickly, and to work out plans whereby eggs may be kept in better condition on the farms than at present. It is estimated that about 10 per cent. of all the eggs received by the egg dealers are bad, and the government is doing all possible to find the cause.

Heaters for Orchard.
Last year J. J. Hamilton, a large orchard owner near Springfield, Mo., placed 10,200 trade oil burners in his apple orchard and as a result sold 200 tons of apples, while other orchards in his immediate vicinity yielded nothing. Early this spring he installed 20,000 additional heaters and again saved his apple crop.

Winter Shearing.
This season of shearing, it is declared that the extra cost of housing required for winter shearing pays large returns.

GRAIN, ETC.

DETROIT—Wheat—Can and September.—No. 1, \$1.15; No. 2, \$1.10; No. 3, \$1.05; No. 4, \$1.00; No. 5, \$0.95; No. 6, \$0.90; No. 7, \$0.85; No. 8, \$0.80; No. 9, \$0.75; No. 10, \$0.70; No. 11, \$0.65; No. 12, \$0.60; No. 13, \$0.55; No. 14, \$0.50; No. 15, \$0.45; No. 16, \$0.40; No. 17, \$0.35; No. 18, \$0.30; No. 19, \$0.25; No. 20, \$0.20; No. 21, \$0.15; No. 22, \$0.10; No. 23, \$0.05; No. 24, \$0.00.

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New Sub-Division of Whitehead & Mitchell
One Block West of Woodward Avenue
At Birmingham,
These Lots, 69 in number, are surrounded by Harmon, Greenwood and Oak Streets, high and dry, beautifully situated, and for a home or an investment, never can be excelled.
Many elegant new homes surround this attractive sub-division.

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Population nearly 2,000. Taxes light. Finest climate, and healthiest-located village near Detroit, being 300 feet above Detroit River, with the best class of people on earth to associate with. One of the finest schools in Michigan, averages even up and better with 10 cities in Michigan that have each a population of 4,000. Our graduates enter the U. of M. on their diplomas. Six Churches, and only 12 miles from city limits of Detroit. Cars run conveniently both to and from Detroit. We have the best Water-Works System in Michigan. We are healthy—no case of diphtheria or malignant scarlet fever has originated here for over 30 years.

See A. Whitehead or George H. Mitchell for Particulars

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PISO'S REMEDY

For Coughs and Colds

Teach Calf Early.

The longer the calf is allowed to suck the cow the harder it will be to make it drink from a bucket.

A Valuable Cow.

A Holstein cow, 3 years old, owned by J. J. Hamilton, near Springfield, Mo., is reported to have averaged over 50 pounds of milk per day, from which was made 45 pounds of butter for seven days.

See A. Whitehead or George H. Mitchell for Particulars